

TRANSCRIPTION OF VIDEO RECORDING
TECHNICAL ADVISORY COMMITTEE WORKSHOP
ELECTRIC RELIABILITY COUNCIL OF TEXAS

REVIEW OF ORDC IMPACT AND PRICE REVERSAL CONCERNS -
ERS/LOAD ACTING AS RESPONSIVE RESERVE/RUC

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1 (Video recording begins)

2 MS. STEPHENSON: Okay. I have been
3 corrected. We will not start the TAC agenda till one
4 o'clock based off the meeting notice, so we'll go
5 straight into the workshop piece now and then pick up
6 the TAC voting items at 1:00.

7 MS. MORRIS: All right. We are ready to
8 go.

9 So the purpose of -- of the workshop this
10 morning is to tee up a vote at TAC on the Resource
11 Adequacy Task Force policy decisions that we've been
12 asked to make by the Public Utility Commission. Our
13 directive was to look at price reversal and impacts on
14 the ORDC from ERS deployments, Load RRS deployments, and
15 RUC 0 to LSO.

16 Our goal for today at the TAC meeting is
17 not to necessarily approve and endorse specific language
18 but to endorse principles related to price reversal and
19 the impacts on the ORDC from Load ERS -- I mean, from
20 ERS, Load RRS, and then determine a policy direction for
21 RUC. All NPRR language will still need stakeholder
22 approval, so it will go through the PRS TAC process.
23 So, again, we're -- we're trying to make sure we make a
24 policy cut.

25 Just as a reminder, the Resource Adequacy

1 Task Force has met a number of times to discuss these
2 issues, and we've also had some discussions and some
3 attempts to vote at TAC previously. Our due date is
4 today. I want to make sure that we all know that our
5 due date is today. And the reason for that is that the
6 PUC meets tomorrow, and it doesn't -- and it meets again
7 on June 20th, which is after -- I mean, prior to the
8 next TAC meeting. So today is our day to make a
9 decision and -- or tomorrow, because we have a
10 meeting -- the TAC meeting can go into tomorrow. So,
11 again, our TAC action needed is to vote on policy on the
12 three items that we've discussed.

13 A number of proposals have been out there
14 for -- for each of these topics. Just at a high level,
15 one deals with the ORDC reserve calculation and that
16 would be to subtract out ERS from the reserve
17 calculation when ERS is deployed, and the other would be
18 to add the estimated ERS deployment to demand when
19 performing a price run, otherwise known as three-step
20 SCED. There was some discussion of both proposals.

21 Bill?

22 MR. SMITH: I had a question about the
23 process and what the expectation was. So are we
24 expected to have a decision on consensus to report at
25 the open meeting tomorrow, which starts at 9:30, or --

1 MS. STEPHENSON: No, probably not.

2 MR. SMITH: Okay.

3 MS. STEPHENSON: We -- our task was to
4 come back by June. I also want to see if TAC -- I'd
5 like to give the board an update on where we are --

6 MR. SMITH: Okay.

7 MS. STEPHENSON: -- also, so I think
8 that's really --

9 MR. SMITH: This isn't something we need
10 to have decided today?

11 MS. STEPHENSON: No. If we need to spill
12 over to tomorrow --

13 MR. SMITH: Okay, thanks.

14 MS. STEPHENSON: -- I think we have
15 flexibility, yes.

16 Randy?

17 MR. RANDY JONES: Sandy, is it fair to
18 characterize the two bullet points, the first one
19 subtract it when it's deployed versus doing a three-step
20 SCED? Isn't three-step SCED really the -- part of the
21 ERCOT proposal which most people consider, I think, a
22 longer-term approach to fixing it, whereas the first
23 bullet subtracting it out would be a near-term something
24 that could be accomplished sooner?

25 MS. MORRIS: I'm not -- I haven't seen an

1 impact analysis on those, so I would defer to ERCOT on
2 the timing that they could implement those. I think --
3 I think I hear Brad laughing in the hallway, so...

4 MR. RANDY JONES: Yeah, I think it's
5 important to -- to distinguish between what can be done
6 soon and what's going to take a longer term to get done.
7 When you say "three-step SCED," lifting the hood on the
8 SCED engine seems to me to be a longer term.

9 MS. MORRIS: So, Brad, the question is:
10 What is the timing of implementation for either of the
11 two ERS proposals we're looking at on the screen?

12 Have some more coffee.

13 MR. BRAD JONES: You're just talking about
14 Bullet 1. Correct?

15 MS. MORRIS: Bullet 1 or Bullet 2, not --

16 MR. RANDY JONES: Bullet 1 versus Bullet
17 2.

18 MR. BRAD JONES: So Bullet 1, short time;
19 Bullet 2, long time. Yeah, big -- big effort on Bullet
20 2, but -- we can accomplish both of those, but Bullet 1
21 would be an easy change for us to make.

22 MS. MORRIS: Okay.

23 MR. RANDY JONES: Okay. Thank you. I
24 think that's an important distinction to make.

25 MS. STEPHENSON: And when you say easy

1 change, I want to make sure everyone understands: It
2 would not be done by this summer. It would be something
3 that's looking like toward the end of next year as --
4 end of this year maybe or -- I don't want to give you
5 any -- but it's not this summer.

6 MR. BRAD JONES: Yeah, late this year,
7 beginning of next.

8 MS. MORRIS: And -- and long-term for the
9 three-step SCED would be what -- what's -- what do --
10 how do we define long-term for the three-step SCED?

11 MR. BRAD JONES: Yeah, I think that would
12 be fair. We really don't have any data on that, but Cy
13 (phonetic), would you step back up to -- well, I was
14 going to give you John Varnell's seat, but...

15 MS. MORRIS: Mine's at the end by Chris.
16 You can sit there.

17 UNIDENTIFIED MALE SPEAKER: I missed the
18 question.

19 MS. MORRIS: Oh, like you -- you guys have
20 said short-term versus long-term, and we were looking
21 for a little bit more clarification on what long-term
22 meant for the three-step SCED.

23 UNIDENTIFIED MALE SPEAKER: It would be
24 sometime in 2015, maybe the first half of 2015 that we
25 could get it done if -- if we really had advanced

1 notice.

2 One of the things that is happening right
3 now, at least on the MMS side, is we're going through a
4 relatively big refresh of the technologies, you know,
5 updating the servers, operating system, and all that.
6 So that's going to take a bulk of time this year.
7 There's extensive testing that we have to do. So that
8 really is -- is kind of the lead time. And it doesn't
9 stop development, but it does kind of hinder the
10 deployment into production of both of these.

11 The first item is less effort, but we'll
12 have to kind of consolidate it with the current
13 activities that are going on. So that's why the first
14 bullet item might take a little longer, you know. The
15 effort is not that significant as the second one, but
16 for the second one, since we have a longer time for
17 development, you know, we can wait. So it'll be -- I
18 would say some -- something like the -- sometime in 2015
19 for the second bullet item.

20 MS. MORRIS: Okay.

21 MR. BRAD JONES: So clearly it's really
22 hard to set these down, but if we -- if we began working
23 on that today, I think our target would be to get ready
24 for next summer, the second bullet, and to get the first
25 bullet ready for January perhaps, but that would require

1 us going back and figuring out exactly what the
2 requirements are.

3 MS. MORRIS: Okay. Okay. Thank you. I
4 know that puts you guys on the spot. Okay. I'm not
5 going to go through that slide.

6 Load RRS has three options also. One is
7 the do-nothing option related to the ORDC reserve
8 calculation. The other is to subtract out load from the
9 reserve calculation when it's deployed for price
10 formation, and the third is the three-step SCED.

11 And there are a number of RUC discussions.
12 One is the augmented ORDC or a shifting Mu by a factor
13 of either a standard deviation or a fixed megawatt. I
14 believe Mr. Helton will be discussing that shortly.

15 One is removing RUC HSL from Rs. One is
16 three-step SCED. I believe Amanda will be discussing
17 that soon. And then the other would be changing the
18 ancillary service procurement during periods of risk.
19 And that really hasn't been on the table for discussion
20 much through the RATF process.

21 So that is the tee-up for this. Are there
22 questions, or shall we proceed with our presentations?

23 MS. STEPHENSON: Amanda, did you have
24 something?

25 MS. FRAZIER: Well, I actually wanted

1 to -- on the slide that talks about Load RRS, I don't
2 know if it would be helpful to explain why this is
3 different than ERS in terms of the treatment in both the
4 ORDC and in the energy price.

5 So for ERS, the reason why both -- do both
6 is an option is because ERS is not included in the ORDC
7 at all. And so when ERS is deployed, it has a price
8 reversal effect in the ORDC, but it also doesn't have a
9 price in SCED. So it's compounded by -- that effect is
10 compounded in the energy price as well.

11 For Load RRS, Load RRS is in ORDC, so you
12 wouldn't do both, fix the -- change the ORDC and change
13 the energy price because they don't have equivalent
14 effects in the ORDC and in an energy price.

15 MS. MORRIS: Thanks, Amanda.

16 MS. STEPHENSON: Well, I first want to
17 thank RATF for all the work they've been doing and
18 everyone who's been contributing. I know it's been a
19 lot of work and a lot of series of discussions, so we
20 really do appreciate all of that.

21 And we'll start with Bob, I think. And
22 let's start going through the augmented ORDC. I know --

23 MR. HELTON: I don't have slides.

24 MS. STEPHENSON: I know. You're talking
25 about it. And then maybe we could pull up his NPRR, if

1 you don't mind. Could we pull up NPRR627, if you don't
2 mind?

3 There's two zip files. One is dedicated
4 to the workshop.

5 MR. HELTON: We have 627 in there?

6 MS. STEPHENSON: The other zip file is in
7 the upper right-hand corner.

8 MR. HELTON: Thank you, Brittney. Okay.
9 Do you want to do this and page with you?

10 (Indiscernible discussion)

11 MR. HELTON: Okay. All right. Let's go
12 through -- and how this came up is, if you recall, there
13 was a couple of things that happened, is, you know, we
14 got the -- the charge from the Commission to go look at
15 price reversal issues. And the other thing we had going
16 on was the January 6th event and the February events
17 where ERCOT had been doing a considerable amount of RUC
18 based on the weather conditions. So there was two
19 dynamics going on at the time. And so therefore this
20 came up as an idea on the RUC in the RATF.

21 One thing I want to point out is, if you
22 look at the other proposals that are up there, they are
23 designed to either stop a price reversal in the pricing
24 side, which is what 626 does, or they are looking at the
25 ORDC adder side, such as the ERS proposal that Amanda

1 was talking about a minute ago.

2 This is different. This is -- has nothing
3 to do with price reversals in either side of the
4 equation. It's designed to put together the incentives
5 that would have the market commit additional resources
6 in the realtime through offline and a small amount of
7 online based on how much you add to the -- augment the
8 ORDC to get to a place to where ERCOT no longer needs to
9 or feels like they need to RUC. And that's what this is
10 designed to do is come out with a market solution to do
11 that.

12 Now, I'll go into the way this was
13 written. I wrote this in a manner that was very, very
14 open to how we do that. We could either do it by
15 adjusting the Mu, or we could do it by adjusting by a
16 megawatt level, and we could have a discussion in the
17 way this is written is that TAC would approve that and
18 go to the board for approval on which way we'd go. And
19 what that is designed to do is to increase the value of
20 those reserves, thus creating a more self-commitment and
21 self-availability that would increase the realtime
22 reliability through the market rather than having RUC
23 being used.

24 The other side of the equation is: When
25 do you do it? And I've left that quite open also. And

1 that's been open to whether we could do it seasonally,
2 monthly. We could put some criteria around it to where
3 we look at and have ERCOT tell us what they believe is
4 the parameters they would be looking at to say, "Look,
5 this day, this condition, we believe there's increased
6 risk, so we would probably RUC on this day." And,
7 therefore, what we'd do, set up those parameters, have
8 it transparent to the market; and when those parameters
9 were met, ERCOT would implement either the megawatt
10 change or the -- the augmentation through the Mu and the
11 standard deviation.

12 MS. STEPHENSON: We have a question over
13 here from Seth.

14 MR. HELTON: Yeah, Seth.

15 MR. COCHRAN: Yeah. Seth Cochran.

16 What would have a bigger impact on average
17 price? So I'm thinking if you increase the standard
18 deviations, you're just going to increase the prices in
19 the tail sort of events, or at least you would augment
20 the tail events; whereas if you increase the average,
21 then is that the Mu? Right? The average?

22 MR. HELTON: The Mu. What that does is
23 that shifts the LOLP to the right. So what would happen
24 is, you would therefore increase the value of the
25 reserves by some amount up until you got into the LOLP.

1 It shifts it to the right.

2 MR. COCHRAN: Okay.

3 MR. HELTON: Now -- now, let's think about
4 that. I'm really glad you --

5 MR. COCHRAN: The other one --

6 MR. HELTON: Go ahead.

7 MR. COCHRAN: -- just fattens the tail.

8 Right?

9 MR. HELTON: What?

10 MR. COCHRAN: The other one just fattens
11 the tail?

12 MR. HELTON: It does fatten the tail. It
13 will do that. And what that's doing is giving that
14 incentive to commit those resources earlier and at
15 different time frames and sooner than you would under
16 the normal --

17 MR. COCHRAN: Now could you --

18 MR. HELTON: -- trying to get that.

19 MR. COCHRAN: Could you do both?

20 MR. HELTON: Both what?

21 MR. COCHRAN: Could you increase both, the
22 standard deviation and the mean, or does it have to be
23 one or the other or what's -- what's --

24 MR. HELTON: I think to really do it
25 right, you would want to do one or the other to get

1 there, I think, if you start playing with that, because
2 really what we're trying to do is get a self-commit to
3 increase the reliability in realtime, is what we're
4 trying to do.

5 Now, one thing that you mentioned that I'd
6 like to go through, and I would suggest that -- that
7 everyone go back to their shops and dig into the data,
8 is when you do this, there's a couple of dynamics that
9 happen when you're talking about the pricing. And I
10 want everybody to go back and look at the imbalance real
11 closely and see what happens.

12 What will happen is, you do increase some
13 of the ORDC charges through the imbalance when you're
14 out there at the tail by some amount. It would be --
15 it's not a very large amount, but it's enough to change
16 some of the commitments.

17 When you go into and start getting closer
18 to scarcity, if -- you're also increasing the ORDC
19 there. So what happens is, is the ORDC then becomes a
20 larger number while the LMP is still at a lower number
21 and so therefore the adder is higher. And when you're
22 using reserves, that increases the imbalance credits
23 back to loads at that time. And therefore -- and the
24 reason it's doing that is, you're actually transferring
25 that value into the energy and out of the ancillary

1 services. So if you've hedged your energy and you go
2 into those events, you actually have a larger credit
3 back when you're leading up.

4 Now, once the LMPs take over and they
5 become large, the ORDC starts getting smaller because of
6 the VOLL minus L -- minus system Lambda -- and the
7 refund back, the credit back through the imbalance,
8 starts to decrease. So it actually will increase going
9 into scarcity the -- the credit back to loads during
10 those times.

11 So you may be buying two cups of coffee on
12 the tail, but you're getting two Mercedes whenever
13 you're going into scarcity is what happens if you're
14 covered, your energy in realtime, which this would drive
15 you to also do.

16 (Background noise)

17 MR. HELTON: And I suggest go back and --
18 and I'm trying to put some slides together we're working
19 with to look at the data, so I don't have those
20 available today --

21 UNIDENTIFIED FEMALE SPEAKER: Hey, could
22 we have everyone please mute their phones. We're
23 getting a lot of background noise.

24 MR. HELTON: -- to show how that actually
25 happens because I believe -- I wasn't even asking for a

1 vote on this today basically because of what I said
2 earlier. This isn't really a price reversal issue, and
3 that's what I thought that the assignment was from the
4 Commission.

5 This is a -- a let's stop RUCing issue.
6 And where I think this should go is to WMS and to the
7 group that we're talking about, Seth, that is looking at
8 killing RUC, which I call "kill bill," and I think
9 that's where that should really be to go through and vet
10 that out and look at how that would interact through
11 trying to stop RUC.

12 And, John, you had something you wanted to
13 add?

14 UNIDENTIFIED MALE SPEAKER: Yeah. I just
15 want to clarify -- and I may have misunderstood the
16 question, Seth, so if I did, I apologize; but when you
17 add something to the Mu, you are shifting the curve.
18 You are not changing the shape. So the shape of the
19 curve is exactly the same. All you're doing is shifting
20 it.

21 MR. COCHRAN: So at all levels, you're
22 going to move things up?

23 UNIDENTIFIED MALE SPEAKER: Yeah, it's
24 basically shifting it out to the right, but it does not
25 change the shape.

1 MR. COCHRAN: Right.

2 UNIDENTIFIED MALE SPEAKER: So I don't
3 know if that was clear I just wanted to --

4 MR. COCHRAN: But the standard deviation
5 would change the shape. Right?

6 UNIDENTIFIED MALE SPEAKER: No, it will
7 not.

8 MR. COCHRAN: That would not either.
9 Okay.

10 (Simultaneous discussion)

11 UNIDENTIFIED MALE SPEAKER: What is
12 confusing about it is the amount that you're going to
13 add to Mu. What Bob is saying is that's one standard
14 deviation, so it could be, you know, 1200, 1500,
15 whatever that number is. So effectively all you're
16 doing is adding -- I'm going to use 1200 as an
17 example -- you're adding it to Mu and shifting it. You
18 could change that to any number you want, whether it's
19 500 --

20 MR. COCHRAN: Okay.

21 UNIDENTIFIED MALE SPEAKER: -- 600 --

22 MR. COCHRAN: Okay.

23 UNIDENTIFIED MALE SPEAKER: -- whatever.
24 You don't change the shape.

25 MR. COCHRAN: Okay.

1 MR. HELTON: Now, correct me if I'm -- if
2 I'm wrong, John, but another thing it also does, if you
3 shift the Mu, you have a less drop with the one megawatt
4 change between 2,000, and 2,001. I believe that also
5 comes in with that shift.

6 UNIDENTIFIED MALE SPEAKER: Yeah.

7 MR. HELTON: So you don't have today --
8 when you go into a situation to where you hit
9 2000 megawatts, which is LOLP, you go to VOLL.

10 Now if you're at 2,001 megawatts -- that
11 is, drops to 4500 and possibly below -- based on one
12 megawatt change, because statistically speaking, you
13 have a 50 percent chance of whether you're going to gain
14 a megawatt or lose a megawatt. And this would -- would
15 mitigate some of that cliff that we have in the LOLP
16 also. So those are -- that's kind of where we're at.

17 And I think, Clayton, you have some
18 comments.

19 MR. GREER: What timeline would you be
20 using to make these adjustments?

21 MR. HELTON: That's what we -- that's why
22 I've wrote this very broadly at this point in time, to
23 where as a stakeholder group, we decide that on whether
24 it could be -- I mean, it's designed to where you could
25 do it all the time. You could do it seasonally; you

1 could do it monthly; you could do it daily; you could do
2 it hourly; but I understand that the -- the -- if you
3 get that down too low, then trying to look out there and
4 trade around that and expect to see what's going on does
5 get more difficult. So transparency and getting
6 together to what would be the right frame to do that
7 would be through the stakeholder process.

8 MR. GREER: Yeah, it's completely
9 unworkable if you get below seasonal.

10 MR. HELTON: That -- I understand your
11 thoughts on that. And that's why what I really wanted
12 to get into to talk about that is the gives and takes
13 that you have through the imbalance. And I would
14 suggest that the load side especially take a look at
15 that and take a look at what that imbalance does with
16 the augmented ORDC if you've covered your energy and how
17 that works out. So I think you'll find some interesting
18 things in there.

19 So that's really all I have for that
20 piece. I'm not sure what TAC's pleasure is with that.
21 You've heard what I -- I think we need to do is to move
22 that to the process to look at the piece of how we
23 mitigate RUCs, since this is really not a -- a price
24 reversal issue. It's trying to keep you out of the
25 situation to where you have those price reversals.

1 MS. STEPHENSON: Okay. Are there any
2 questions for Bob, or do we want to go through the NPRR?

3 MS. MORRIS: So if Bob isn't asking for a
4 vote on this today, do we need to go through the NPRR,
5 or do we just need to decide whether or not we want
6 somebody else to look at it for some other purpose
7 besides the assignment we've been given?

8 MS. STEPHENSON: It's up to TAC. I mean,
9 any preference?

10 MS. MORRIS: Seems to me we have an awful
11 lot to do today. If Bob isn't asking for a vote on
12 this, why don't we just go ahead and say we're okay with
13 WMS throwing it into the "Let's look at RUC" pile.

14 MS. STEPHENSON: Sure. I do want to say I
15 think it's going to be an ROS discussion as well, so I
16 think it's fine we go through the normal process. It's
17 going to PRS.

18 MR. HELTON: Probably next -- whenever.

19 MS. STEPHENSON: June 11th.

20 MR. HELTON: June 11th, yeah.

21 MS. STEPHENSON: And so I think -- so the
22 question is: Do we want to send it to WMS/ROS before
23 the June 11th PRS meeting?

24 UNIDENTIFIED FEMALE SPEAKER: Yes, let's
25 do that.

1 MS. STEPHENSON: Okay. Sounds great. Any
2 concerns with that? All right. So I will remand this
3 to the WMS and ROS chairs for their next meeting to
4 discuss.

5 Randy?

6 MR. RANDY JONES: Yeah, I'm good with
7 that.

8 Just one question for Bob and probably for
9 John as well. By -- by moving the -- the entire curve
10 to the right or changing the Mu, what's the distinction
11 between that and changing the minimum contingency level?

12 MR. HELTON: When you hit -- when you hit
13 the VOLL --

14 MR. RANDY JONES: Yeah.

15 MR. HELTON: -- is really the only
16 difference. What you would do is -- is when you move
17 that over, you will not hit -- you would hit 9,000
18 earlier with the megawatt levels. This doesn't change
19 when you hit VOLL. It just changes that curve to the
20 right a little bit below there.

21 MR. RANDY JONES: Uh-huh. Have you had
22 any discussions with the Commission about the impact it
23 would have and the fact that it may look somewhat like
24 changing the minimum contingency level that they've set
25 in an open meeting?

1 MR. HELTON: They have been involved and
2 have seen the augmented ORDC. They were both at several
3 presentations that Dr. Hogan put on that went through
4 the basis for this and what it does and how it reacts
5 and actually why you actually do it.

6 If you look at this, just to clarify, this
7 adder here, the augmentation is augmented in the offline
8 30-minute adder. And that is done very specific reason.
9 What that does is it keeps the difference between the
10 offline and online the same so you do not set up an
11 incentive for everybody to start their units up and
12 flood the market with and be inefficient in the
13 dispatch. That's why you only augment the offline,
14 since if you think about it, the online includes the
15 offline adder. So that keeps that ratio the same;
16 therefore, we don't set up an incentive that everybody
17 start their units up and have inefficient dispatch.

18 MR. RANDY JONES: Okay. Thanks, Bob.

19 MS. STEPHENSON: Okay. Thank you, Bob.

20 MR. HELTON: Do you want me to say
21 anything about ERS while I'm here, or are you going to
22 carry that with the rest --

23 MS. STEPHENSON: I think we're going to
24 carry it with the rest of them.

25 MR. HELTON: Yeah, because Amanda said

1 most of everything I was going to say, and that was
2 about it.

3 MS. STEPHENSON: I think we're good, and
4 then we can look at the OBD if we need to and talk about
5 the differences in the proposals.

6 MR. HELTON: Thank you.

7 MS. STEPHENSON: All right. Amanda, would
8 you mind.

9 MS. FRAZIER: Thanks, y'all. I'm just
10 going to do a real short presentation on NPRR626, which
11 was filed a few weeks ago. And it's one that we have
12 discussed in RATF a number of times. And so I -- I
13 think a lot of you probably understand it, but I just
14 want to give a little bit of an overview.

15 So at the first, I just wanted to lay out
16 what the goals are. I really think there are a few -- a
17 few competing -- maybe competing is probably not the
18 right word because they're both noble sets of goals of
19 what we're trying to do with both the ORDC and prices in
20 SCED.

21 And I think that there is a group of
22 market participants who want to make sure that the ORDC
23 precisely reflects the number of megawatts of reserve
24 that we have on the system, which I think is -- is good
25 and that's the purpose of the -- of the ORDC, but

1 there's also a need to make sure that prices reflect the
2 actions that are being taken for reliability when we're
3 in scarcity conditions. And so sometimes those goals
4 are competing because it's not always the case that
5 ERCOT's precisely taking, you know, reliability actions
6 based on the number of reserves that we have on the
7 system. So the primary goal, at least for Luminant, is
8 to have prices reflect scarcity despite reliability
9 solutions that are being deployed by ERCOT operators
10 during an emergency.

11 The prime -- the primary obstacles to
12 achieving that goal are, one, that we have a large
13 volume of load resources both through ERS and the
14 noncontrollable load resources that are under -- on
15 under-frequency relays that provide responsive reserve
16 that are deployed without setting price. And then
17 second, there is some generation capacity that's brought
18 online for reliability, such as RUC or RMR, rather than
19 by market forces. And so that -- that generation is
20 online and contributing, at least this LSL amount of
21 energy, for free to the market.

22 So NPRR626 describes an additional SCED
23 execution. It determines what the clearing price would
24 have been, what the LMP would have been, if, rather than
25 using load resources or unpriced RUC LSL or RMR LSL to

1 serve those -- to serve load. It also creates an adder
2 which is called the realtime reliability deployment
3 price adder based on the difference between the third
4 SCED run and the second SCED run, if any.

5 As written, NPRR626 covers noncontrollable
6 load resources, emergency response service, firm load
7 shed and the 0 to LSL capacity for RUC committed
8 resources and RMR resources that are on -- online.

9 MS. STEPHENSON: And Amanda, before you go
10 there, can I ask a clarification question back there?
11 So that realtime reliability deployment price adder
12 would be just like an ORDC adder?

13 MS. FRAZIER: As written in NPRR626, it's
14 applied just like the ORDC. So it creates an adder and
15 then it's paid and settled just like the ORDC using the
16 ancillary services imbalance and to the same sets of --

17 MS. STEPHENSON: Great.

18 MS. FRAZIER: -- resources.

19 MS. STEPHENSON: Marty?

20 MR. DOWNEY: Amanda, just -- could you
21 describe noncontrol -- controllable load resources?
22 What do you mean by that?

23 MS. FRAZIER: Sure. So the distinction in
24 the protocols between noncontrollable load resources and
25 controllable load resources are that controllable load

1 resources have to have offers in SCED and be
2 dispatchable by SCED. They have to be able to respond
3 to a five-minute base point.

4 And noncontrollable load resources are
5 just deployed by ERCOT operators or sometimes by
6 frequency deviations on the system. And normally
7 it's -- it's either in an emergency situation or it's in
8 response to a frequency deviation.

9 MR. DOWNEY: So -- so that's still
10 everything -- all the load resources within ERCOT's
11 control and not saying what the market's doing?

12 MS. FRAZIER: This does not cover load
13 that's responding on its own.

14 MR. DOWNEY: Yes.

15 MS. FRAZIER: That's not being dispatched
16 by -- by ERCOT or deployed by ERCOT.

17 MR. DOWNEY: Okay.

18 MS. FRAZIER: Is that -- does that answer
19 your question, Marty?

20 MR. DOWNEY: Yes.

21 MS. FRAZIER: Okay.

22 MR. DOWNEY: I just want to understand the
23 proposal.

24 MS. FRAZIER: Okay. Okay. So NPRR is --
25 so I call it a third SCED run. It's actually a third

1 and a fourth SCED run because the third SCED run does
2 consider noncompetitive constraints and makes sure that
3 they are still appropriately treated for generators that
4 may have local market power. So it is considering
5 noncompetitive constraints in the SCED run.

6 And it also minimizes uplift concerns
7 because the majority of it's reflected in realtime and
8 it's charged to load that's consuming as a component of
9 the price, and for that piece, you can hedge it just
10 like energy.

11 Now, the additional adder that's paid to
12 the capacity that's available that's not actually
13 producing energy is paid mostly through the ancillary
14 service imbalance, but if there is a deficit in the
15 ancillary service imbalance, then it would be an uplift.

16 But because reliability deployments occur
17 primarily during emergency conditions when most
18 generation resources are being dispatched, then it
19 should be a relatively low adder that's being paid to
20 the -- the nonenergy producing capacity. And when
21 ancillary services are deployed, that's when the
22 ancillary service imbalance is actually being populated
23 with -- it's -- becomes positive when ancillary services
24 are deployed because that's when the ORDC and the adders
25 are populating the imbalance. That makes sense?

1 Okay. So we view this as a good
2 compromise because it mitigates price reversal and
3 suppression that's associated with reliability
4 deployments while maintaining least cost dispatch. And
5 it also adjusts the energy price for reliability
6 deployments without modifying the calculation of
7 reserves in the Operating Reserve Demand Curve function.

8 And the point here, why we believe it is a
9 compromise, is because, like I said earlier, with
10 respect to ERS, the problem is both in the energy price
11 and in the ORDC because the ORDC doesn't have the -- it
12 doesn't have ERS treated in the calculation, so it
13 actually reverses when ERS is deployed because it looks
14 like a reversal of the generation to be dispatched. The
15 load actually solves itself but then reverses because
16 the reserves aren't counting for the ERS.

17 And that's it, unless anyone has
18 questions.

19 MS. STEPHENSON: Yeah, I think we have --
20 Eric has a question.

21 MR. GOFF: So in terms of the calculation
22 of the reliability adder, who is the adder paid to in
23 NPRR626?

24 MS. FRAZIER: As it is proposed, it's paid
25 just like the ORDC, so it's paid to anybody who is

1 providing energy, and it's paid to the available online
2 capacity.

3 MR. GOFF: Okay. So from my perspective,
4 that's a bit problematic because it's paying a adjusted
5 energy price to all available capacity, not just the
6 capacity that either was or would have been producing
7 energy.

8 So the -- if you're going through a
9 process to determine what the -- the energy price should
10 have been but for ERCOT's reliability actions, it
11 shouldn't pay to all of the headroom but instead just to
12 the megawatt hours that were producing that energy that
13 should have had an adjusted price and then those that
14 would have been at a higher base point because of that
15 higher price. It doesn't seem at all rational to pay an
16 adjusted energy price to all capacity regardless of
17 whether or not they were producing energy. So I would
18 prefer a different mechanism, and I wonder if Luminant
19 is open to consideration of some sort of mechanism like
20 that.

21 MS. FRAZIER: We are open to that.
22 It's -- so the -- the distinction is that we need to
23 make sure that no unit loses its physical hedge by the
24 change in the price between the SCED runs. So as long
25 as you pay the adder both to the energy that's producing

1 and to any capacity that would have been dispatched
2 within the difference in price between this third SCED
3 run and the -- and the second SCED run, that, we
4 believe, covers the -- that makes generators hold to --
5 to the new pricing solution. So we would be indifferent
6 as to that solution, although this was proposed as the
7 easier to implement --

8 MR. GOFF: Okay.

9 MS. FRAZIER: -- option.

10 MR. GOFF: That makes sense. If it is,
11 you know, just a choice of ease of implementation, I
12 would prefer to do something that is based on kind of
13 the concepts of how we pay in charge for energy today,
14 which is based on production and consumption of energy,
15 rather than some novel concept of how to pay for energy;
16 but I wouldn't be opposed to having one be implemented
17 first just to get close to the right answer followed by
18 a second phase, if that was necessary to achieve a rapid
19 implementation. But I would prefer obviously just the
20 implementation that only pays energy adjustments to
21 people that were producing or would have produced energy
22 and charging people that consumed energy.

23 I'd also like, in that regard -- this is
24 calculating an energy adder, but in order to produce
25 energy, typically you have to burn fuel. And so if

1 energy wasn't produced because you're paying somebody
2 off their -- where they would have been but for the
3 reliability dispatch, I think we would need to remove
4 the cost of fuel that wasn't burned from the energy
5 payment. So I think that would be appropriate in that
6 instance as well.

7 MS. STEPHENSON: Okay. Seth?

8 MR. COCHRAN: Which of the two -- I hear
9 Eric saying you either pay the available capacity or you
10 pay the capacity that would have moved up. Of course,
11 in all this you pay the energy to produce the adder as
12 well. What would have less of an impact on make-whole?
13 And is it -- are -- or is make-whole payments not even
14 involved in any of this?

15 MS. FRAZIER: Well, the -- you know,
16 make-whole is a dirty word, but this is a -- the adder
17 itself is intended to cover -- the adder itself would
18 need to make whole any generator who was -- who would
19 have liked to produce energy with their physical
20 resource. Above and -- I think intuitively, Seth, my
21 answer would be that Eric's proposal would create
22 less -- a smaller adder, a smaller adder times -- the
23 adder itself is -- will be the same, but a smaller
24 number of people who get paid the adder.

25 MR. COCHRAN: Okay. So this adder, it's

1 not included in the SCED LMP?

2 MS. FRAZIER: The adder is -- it's created
3 as a new adder just like the RTORPA. It's called the
4 R --

5 MR. COCHRAN: Okay. So the only --

6 MS. FRAZIER: -- reliability --

7 MR. COCHRAN: In your present form, the
8 only make-whole would be the people that are getting the
9 adder that didn't -- that didn't produce.

10 MS. FRAZIER: Correct.

11 MR. COCHRAN: Okay. So --

12 MS. FRAZIER: Wait, wait, wait. In the
13 present form, it's not done as a make-whole. It's just
14 an adder that's paid to all energy and all online
15 capacity. Eric's proposing that to -- that you limit
16 payment of the adder to only those people who would
17 otherwise need a make-whole.

18 MR. COCHRAN: And one results in a
19 make-whole and the other doesn't? That doesn't -- I'm
20 not sure if I catch that, how that...

21 MS. FRAZIER: They both -- both -- okay.
22 In both situations -- as proposed and as Eric's
23 recommending, you create an adder in realtime just like
24 the ORDC, and it's populated as part of your total
25 energy price. You know what it is at the time for all

1 of the capacity that's producing energy.

2 Then for the capacity that's not producing
3 energy, the online capacity that's available, the way
4 it's written in 626, all of that capacity would also get
5 the adder.

6 MR. COCHRAN: Right.

7 MS. FRAZIER: What Eric is proposing is
8 that only a subset of that capacity should get the adder
9 and that subset should be made up of those generators
10 who need the adder to cover their physical hedge.

11 MR. COCHRAN: Okay. Okay. And where does
12 that money come from?

13 MS. FRAZIER: Still through the ancillary
14 services imbalance settlement. So to the extent that
15 that is positive because ancillary services are being
16 deployed, then the money is there and will be paid out
17 and it doesn't need to be uplifted to load.

18 To the extent that the ancillary services
19 imbalance is short, then the difference would be
20 uplifted to load just like with the ORDC.

21 MR. COCHRAN: Just like with the ORDC.
22 Okay, thanks. That makes sense. Okay.

23 MS. STEPHENSON: Okay. Marty, do you have
24 a question on this topic, because I have a few more,
25 so --

1 MR. DOWNEY: Yes.

2 MS. STEPHENSON: Okay, great. Go ahead,
3 Marty, please.

4 MR. DOWNEY: Has this been modeled that
5 the impact of this, you know, say on the -- the
6 January 6th event what that would have done versus some
7 of the other things that are gone on?

8 MS. FRAZIER: I have not. I don't know if
9 ERCOT has modeled the impact of this third pricing run
10 on -- for January 6th. I'm looking at John and Cy.
11 They're shaking their heads. I don't believe it has
12 been modeled, Marty.

13 MR. BRAD JONES: We did look at the
14 pricing impact of the RUC over this period, and it
15 was -- it was fairly small over January 6th. I mean
16 January 6, there's no RUC; but over the January period,
17 it was very small.

18 MS. STEPHENSON: Do you have that slide
19 that you produced (indiscernible) peaker net margins?

20 MS. FRAZIER: I think it's difficult to
21 model the -- the extra SCED run because it's --

22 UNIDENTIFIED MALE SPEAKER: Yeah.

23 MS. FRAZIER: Right.

24 UNIDENTIFIED MALE SPEAKER: You had
25 questions?

1 MS. STEPHENSON: Okay. I just had some
2 clarification questions on Eric's proposal on this new
3 methodology different than what we've been talking about
4 in 626. And I'd like ERCOT maybe to answer some
5 questions on how this uplift would look and the credit
6 you get back from a load perspective also based off this
7 type of methodology.

8 MR. BRAD JONES: And John is here to help
9 as well where I stumble, but essentially a 444-type
10 structure, which is what was being discussed by Eric and
11 Seth, would require a make-whole, as already been said.
12 It would require a make-whole to recover the additional
13 cost or the additional revenue associated with those
14 generators that are online, those generators that could
15 have been online based upon their offer curves.

16 Now, I should say, first of all, that's
17 going to be much more difficult, much more complicated
18 for us to do, than what's here in 626. But beyond that,
19 it will require a make-whole.

20 Now, on the 626 application, Eric's raised
21 a concern that some individuals, resources that are not
22 producing energy, may be getting paid this additional
23 amount of value when it's not appropriate, and that's
24 similar to what I think you were saying.

25 In that case, it -- recognizing that

1 concern, 626 would be applied cross the ORDC in such a
2 way as when we're using reserves, that value would be
3 returned to load.

4 Now in the situation where we're not using
5 reserves, let's say in a situation where there's some
6 RUC at 0 to LSL and we would need to reprice, that could
7 also create a make-whole situation. But we would expect
8 in most cases, the way this 626 is developed, that we'd
9 be in a situation where the ancillary service imbalance
10 would return value to loads.

11 Did you have additional questions?

12 MS. STEPHENSON: Yeah, I just want to make
13 sure: Does anyone have questions about that? Yeah.

14 UNIDENTIFIED MALE SPEAKER: So -- go
15 ahead. I can wait.

16 UNIDENTIFIED MALE SPEAKER: I guess just
17 coming back to the genesis of this one, remember we had
18 the Hogan B plus where we just modified the energy
19 prices, and then there was issues raised because it will
20 send the wrong signal, like especially for the quick
21 starts, then we came up with B plus. When we came up
22 with B plus, we're paying that adder to the entire
23 capacity.

24 Now if you have concerns about 626, then
25 you should have the same concerns for the price adder

1 for ORDC being paid to the entire capacity that's
2 online. It's the same principle.

3 UNIDENTIFIED MALE SPEAKER: Well, there
4 were some decisions that were made by the Commission and
5 other decisions that we can evaluate and make the best
6 choices.

7 UNIDENTIFIED MALE SPEAKER: Okay. I'm
8 just -- I'm just throwing that out saying that it's the
9 same exact philosophy.

10 UNIDENTIFIED MALE SPEAKER: I guess the
11 only thing I would -- would add, and I know you probably
12 already know this, at the point that you're deploying
13 ERS or load resources, you're in Step 2, right, which
14 the protocols say Step 2 is 1750. Any reserves that
15 were sold day ahead, which is ballpark a little over
16 4,000, right, any time you fall below that day ahead,
17 those reserves have to be bought back because it
18 simulates realtime co-optimization.

19 So any time -- any time you're buying out
20 of -- out of a position because you're providing energy
21 instead of reserves, that can result into -- in a
22 positive uplift to loads versus when you're buying more
23 than 4,000 megawatts in realtime, it's -- it's a
24 negative uplift to load.

25 MR. GOFF: Okay. Yeah, and so in -- just

1 to get to all of this, I guess, in order, first,
2 there's -- Brad, you said there was a make-whole
3 involved, and I guess we can call it a 444-style
4 mechanism, but I hate to use more inexplicable numbers.

5 So in the mechanism of only paying the
6 resources that were producing energy, or would have
7 produced energy, there's a make-whole for the would have
8 produced component. I agree that that would be a new
9 settlement mechanism; however, not doing that would
10 still result in changes to the outcome of the ancillary
11 service imbalance, which is a load ratio share charge.

12 So in regards to whether or not there is a
13 make-whole component, I think both of these result in
14 changes to the total load ratio share component of -- of
15 additional charges for load -- for load -- load-serving
16 entities.

17 Whether or not it's complicated or not, I
18 assume that y'all have done an impact analysis on it.

19 MR. BRAD JONES: We have not.

20 MR. GOFF: Okay. Okay. So I'm looking
21 forward to finding that out, but it very well could be
22 more complicated; and that's -- that's fine. I would --
23 I would still prefer to do the right answer rather than
24 the least complicated answer.

25 In regards to the question of the impact

1 on quick-start incentives, of course, they may want to
2 come online in response to a price, I think that there's
3 two -- there's two parts to that. One is we need to
4 make sure that the third, fourth SCED run is producing
5 public data so people can see the trend; and then if you
6 know the integrated price for energy, you can make the
7 same commitment decisions as you do in today's market
8 where you see the integrated price for energy that just
9 happens to be from a two-step SCED run. And I -- I
10 think that's the sum of it.

11 In terms of how it interacts with the
12 ancillary service imbalance payment or charge, I think
13 that's all true and interesting, but it's irrelevant to
14 whether or not people that weren't producing energy and
15 wouldn't be producing energy should receive an energy
16 price correction.

17 UNIDENTIFIED MALE SPEAKER: Okay. Yeah,
18 it seems like my question's now answered. So there is a
19 new settlement for paying those that would have moved
20 but did not. Right?

21 MR. BRAD JONES: Under a 444-type
22 structure --

23 MR. COCHRAN: Yeah, under a 440 -- there's
24 a new settlement. Okay. And then there's an allocation
25 associated with that, and that's considered a make-whole

1 payment. But with this, there's just the ancillary
2 service imbalance that takes care of everything. Okay,
3 that's what I was trying to get at with my original
4 questions. Thanks. It's all clear to me now.

5 MS. STEPHENSON: All right. Amanda, I'm
6 going to ask if you could, because I just want to make
7 sure everyone knows what's in 626 in the NPRR, if you
8 could pull it up real quick. And if you can go to the
9 section where we talk about that adder -- I think it's
10 Page 40 or something. I can't -- where you list all the
11 different services which would get the adder or I --
12 circumstances. Yeah, there you go.

13 So, I mean, I think this main section is
14 where the meat of the changes are in the NPRR, as, you
15 know, Amanda described it to everybody, but I just
16 wanted to make sure there was no questions on the
17 language that's here because it is pretty specific and
18 detailed on how you would implement each one of those.

19 MS. FRAZIER: And Randa, while we're here,
20 we did make a change to the draft that RATF looked at
21 with respect to ERS specifically.

22 MS. STEPHENSON: That's a good point.

23 MS. FRAZIER: And so what we've done here
24 is -- what we discussed in RATF with respect to the
25 restoration of ERS is that we don't really have a good

1 sense of how quickly or at what type of restoration rate
2 load comes back online once they're recalled by ERCOT,
3 but ERS, by its contract term, has ten hours to restore.

4 And so the way that we set it up was to
5 just do it as sort of a linear curve over -- where
6 you're restoring 10 percent every hour for ten hours,
7 but we made it subject to TAC review so that if we have
8 future ERS deployments and we have the data that shows
9 that ERS is coming back quicker or ERS is coming back
10 slower or ERS is coming back a lot at once and then
11 slowly over a long period of time or whatever the data
12 shows, we can in the future change that to be more
13 reflective of the actual restoration of ERS. And that's
14 here in Subsection D.

15 MS. STEPHENSON: Any other questions on
16 the load shed piece or anything like that?

17 (No response)

18 MS. STEPHENSON: Okay. Thank you, Amanda.
19 Totally appreciate it.

20 Well, next on the agenda was we were going
21 to talk about the historical RUC methodology, but my
22 understanding right now is the submitter of that has
23 kind of backed away from that proposal, so I don't
24 really have an advocate for it unless anyone here would
25 like to discuss it and wanted to tee it up. Okay. I'm

1 seeing none, so we're going to move on.

2 So what we'd like to do in that time slot
3 now is -- and I'm going to apologize -- sent out early
4 this morning on, I will say, a version of NPRR626 with
5 some compromise solutions. So could you pull up that
6 slide? It's in the TAC workshop zip.

7 Okay. I'll just walk through it and then
8 we'll have open discussion about this. But what this
9 compromise proposal is, is they're taking the shell of
10 NPRR626; however, you are making some adjustments to how
11 that realtime settlement price adder is applied. And so
12 right now, it'll do -- it'll just be adjusted to the 0
13 to LSL for the RUC, deployed ERS with a 10-hour
14 return -- so same way that Amanda just spoke about
15 NPRR626 -- and then online RMR energy and emergency
16 capacity acquisitions.

17 It does not include the firm load shed
18 that she had in her, I think, five items that we just
19 looked at. And then it will also -- I know this is a
20 little out of order, so I'll get back to it -- but will
21 include load resources acting as responsive as well.

22 Now, the adder is going to be calculated
23 like we've discussed by the third SCED run, and it will
24 be the difference between the third or fourth SCED run
25 compared to the second SCED run, and that will be paid

1 to all available generation, which is what Eric just --
2 we had the whole conversation with Eric on. So this
3 would be still using the 626 methodology and not the 444
4 methodology.

5 And the new component on here would be you
6 would add load resources at -- with the proxy offer
7 curve, and what it would be would be a flat curve right
8 now at \$500. It would be similar to the bid-to-buy
9 process that we're going to be using in loads and SCED
10 Version 1. I kind of compare it, but ERCOT will have to
11 model it because it will be different. I think there is
12 some discussion we need to have on how -- because load's
13 not all deployed as responsive as a block, so how does
14 it go in? How does it hit? It'll be -- we need to have
15 some discussion on that.

16 But that is one compromise that's being
17 discussed. Doesn't have to be the only one. But we
18 wanted to get this up and have some time to talk through
19 it, see if there's other variations of this, and see
20 where the stakeholders are. So I'm going to start with
21 Eric.

22 MR. GOFF: So couple questions. One of
23 the differences you highlighted between this proposal
24 and the prior proposal is that this one does not include
25 the megawatts associated with the firm load shed. Is

1 that correct?

2 MS. STEPHENSON: Correct.

3 MR. GOFF: So then the implication of that
4 is if ERCOT sheds 3,000 megawatts of firm load, then
5 SCED would have 3,000 megawatts fewer to solve for.
6 Right? Which --

7 MS. STEPHENSON: Yes, the same way we
8 did --

9 MR. GOFF: -- which could lead to a place
10 where we are in scarcity pricing to a place that we're
11 not in scarcity pricing. Is that a natural implication
12 of that?

13 MR. BRAD JONES: Yeah, that's a
14 possibility.

15 MS. STEPHENSON: Yeah.

16 MR. GOFF: So it seems extremely
17 counter-intuitive to me for us to endorse a proposal
18 that could lead to 50-dollar prices when we're in firm
19 load shed; and as such, I don't think I could support
20 this proposal as -- as is on the screen.

21 MS. STEPHENSON: Randy?

22 MR. RANDY JONES: Yeah, for once, I agree
23 with Eric.

24 (Laughter)

25 MR. RANDY JONES: Yeah, for -- for these

1 out-of-market actions, and I -- I include -- and I think
2 most rational people include -- shedding firm load in
3 Step -- Step 3 is that's definitely an out-of-market
4 action. And those have to be -- those have to be
5 accounted for.

6 And Eric's right. You'll end up having
7 oscillations in the very period when you want strong
8 price signals to loads presuming there's no generation
9 available. You really need strong price signals at that
10 point. And we've had cases in the past where we've
11 gotten into really tight circumstances, and we've seen
12 the price oscillate back and forth, and that's why we're
13 sitting here today.

14 MS. STEPHENSON: Kenan?

15 MR. OGELMAN: Yeah, I mean, I don't
16 disagree with risk of oscillation. The idea here was to
17 put in a proxy for what the LRs would curtail at. So
18 essentially if they could put in a bid to buy, what --
19 what they would put in.

20 UNIDENTIFIED MALE SPEAKER: That's a
21 separate issue. We're talking about load shed, firm
22 load shed.

23 MR. OGELMAN: Okay, well, so --

24 MR. RANDY JONES: Distribution load shed,
25 to be clear.

1 (Simultaneous discussion)

2 MS. STEPHENSON: Okay. Let's let Kenan
3 finish, and then we'll go back --

4 UNIDENTIFIED MALE SPEAKER: Okay. I just
5 want to make sure he's talking to the right point.

6 MR. OGELMAN: I'm not talking to the
7 right -- right issue, so I agree with Eric.

8 (Laughter)

9 MR. OGELMAN: But -- so -- so -- but if --
10 I mean, big blocks, I mean, this would do that; but on
11 the load -- on the load issue, the reason why I think
12 that should come out is, if you think about what's
13 happening in terms of you're putting this adder in, and
14 I have this set of load, you have sent me a request to
15 shed firm load that I -- my load has paid for that --
16 paid for that generation. I'm shedding firm load, and
17 then on top of that, the load that is remaining is
18 paying a premium for the load shed when prices are
19 probably at 9,000 anyway, and I don't understand exactly
20 why I'm -- I'm taking this out.

21 So if you look at it from a load
22 perspective, it's -- it's this double whammy that
23 doesn't make sense to me. The only time where you would
24 actually have a case, in my opinion, to pull the firm
25 load shed out is if the instruction coming from ERCOT

1 was too high. And I don't think load should have to pay
2 for that. And for that reason, I think the firm load
3 shed needs to come out.

4 MS. STEPHENSON: Amanda?

5 MS. FRAZIER: So on the firm load shed
6 piece, I think there -- I agree with Eric that prices
7 should reflect the fact that you're shedding load. I
8 think it will probably naturally do that in most
9 instances because the ORDC should be at VOLL.
10 Hopefully, we're not shedding firm load at 2,000 -- with
11 2,000 megawatts of reserves still on the system.

12 But the way that NPRR626 was written, it
13 shouldn't create a situation where it keeps prices
14 unnaturally high for firm load shed because we reverse
15 it back out of the SCED run when it's recalled. There's
16 not any delay period there like there is for other load
17 that takes a little longer to restore.

18 So I think it really is just a natural
19 backstop to make sure that there isn't an oscillation,
20 although I agree with you that it should be the case
21 that prices are at VOLL anyway because of the operation
22 of the ORDC.

23 MS. STEPHENSON: Okay. Bill, you are
24 next.

25 MR. SMITH: Yeah, I'm interpreting firm

1 load shed here to be EEA 3., and if we're talking about
2 something different, then, you know, maybe this needs
3 further discussion like local transmission firm shed.
4 I'm not sure if that's what the concern is. But if
5 we're talking about EEA 3, then, you know, I think I'm
6 agreeing with what I heard Amanda saying, Kenan, is I'm
7 comfortable removing it, because when we are in EEA 3
8 and we're shedding firm load, the ORDC would have to be
9 setting price appropriately at VOLL. So I just -- I
10 think the risk -- the risk that Eric described, which I
11 agree does exist, I think it's very low, though; and I
12 think we -- we have the situation covered with ORDC.

13 UNIDENTIFIED MALE SPEAKER: Okay. On
14 the -- when we deploy load resources with this, that is
15 deployed -- there's telemetry on that and we know
16 exactly how much that is. On the firm load shed, it's
17 deployed with some under-frequency relays and no
18 telemetry knowing whenever that happens.

19 UNIDENTIFIED MALE SPEAKER: No, we're
20 talking about something different.

21 UNIDENTIFIED MALE SPEAKER: Block -- block
22 load shed. Block load shed --

23 UNIDENTIFIED MALE SPEAKER: Hundred
24 megawatts --

25 UNIDENTIFIED MALE SPEAKER: Well, the

1 rotate --

2 MS. STEPHENSON: Well --

3 UNIDENTIFIED MALE SPEAKER: But the
4 rotating outage is you don't -- only the TO knows how
5 much is --

6 MS. STEPHENSON: Exactly. I don't know --

7 MR. RANDY JONES: They're directed to do
8 it in hundred megawatt blocks.

9 MS. STEPHENSON: I understand, but I think
10 each one have their own plan.

11 UNIDENTIFIED MALE SPEAKER: They have
12 their own plan. They all do rotating outages in the way
13 they do, and they may hit it or they may not hit it --

14 MS. STEPHENSON: Correct.

15 UNIDENTIFIED MALE SPEAKER: -- is the --
16 is the point. (Indiscernible)

17 Either way, though, things are -- that's
18 usually where they're at is at the -- at the low set
19 under-frequency points that they shed at.

20 MR. RANDY JONES: No, that's not accurate.

21 MS. STEPHENSON: Let's -- maybe let's get
22 a TSP to answer that question. I don't know. Can
23 someone explain?

24 UNIDENTIFIED MALE SPEAKER: The load set
25 under frequencies are for large --

1 UNIDENTIFIED MALE SPEAKER: They're SCADA.

2 MS. STEPHENSON: Yeah, the firm, how
3 the --

4 UNIDENTIFIED MALE SPEAKER: Because he
5 didn't hear it in that ear.

6 UNIDENTIFIED MALE SPEAKER: Yeah, I didn't
7 hear it.

8 MS. STEPHENSON: So the question --

9 UNIDENTIFIED MALE SPEAKER: The load
10 set -- describe load set under frequency versus block
11 load shed under -- under a Step 3 EEA is what we're --
12 what we're talking about.

13 UNIDENTIFIED MALE SPEAKER: Yeah, we're
14 not talking about using relays. We're talking about
15 manual load shed directed by ERCOT --

16 UNIDENTIFIED MALE SPEAKER: That's right.

17 UNIDENTIFIED MALE SPEAKER: -- in blocks
18 assigned to TSPs, and they execute that manually by
19 circuit within their distribution load area and do it as
20 expeditiously as possible to achieve the result of
21 stabilizing the system. And it is known at any given
22 time what our quantity is, but it's not telecommunicated
23 to ERCOT or any other fashion.

24 UNIDENTIFIED MALE SPEAKER: Right.

25 UNIDENTIFIED MALE SPEAKER: It can be

1 verbally communicated, but it's not -- if we're assigned
2 to 500 megawatts, we'll achieve that in some number of
3 minutes, and we will hold that until ordered otherwise.

4 UNIDENTIFIED MALE SPEAKER: That's right.

5 MR. BRAD JONES: So it may not be an exact
6 value, but we give targets to --

7 UNIDENTIFIED MALE SPEAKER: It would be at
8 least 500 if that's what's ordered, because otherwise I
9 won't be in compliance with NERC requirements.

10 MR. BRAD JONES: So it will be 500 or
11 over.

12 UNIDENTIFIED MALE SPEAKER: It will be 500
13 or more or whatever the number is directed.

14 MS. STEPHENSON: Thank you, John.

15 Eric, you were next.

16 MR. GOFF: So a couple things. In regards
17 to ORDC should be creating these price outcomes, I think
18 that's true. It should be. But given the fact that
19 then you expect in -- in the -- in the typical case of
20 ORDC to do it and the ORDC energy price policy when
21 conjoined together has a maximum cap of the offer cap in
22 2015. There is no harm in making sure that you're doing
23 it right, especially if we're already opening up the
24 hood for 0 to LSL RUC, deployed ERS, et cetera.

25 And given the certainty of -- given the

1 certain need of having correct prices in EEA 3, come on.
2 There's -- there's no harm in making sure that firm load
3 shed doesn't cause price reversal. If it -- if it ever
4 causes price reversal, the energy only market would be
5 laughed at.

6 UNIDENTIFIED MALE SPEAKER: Randy?

7 MS. STEPHENSON: Yeah, Randy.

8 MR. RANDY JONES: Just one quick comment.
9 You know, I heard a -- heard a comment about what loads
10 paid for, and I knew we'd -- we'd hit on this threshold
11 issue sooner or later. And -- and I would just remind
12 TAC members that the Commission's already decided.
13 They've told us what categories of out-of-market actions
14 by the ISO need to be corrected for, and they've told us
15 that we need to come back with solutions.

16 And the idea that load pays for certain
17 things and that we shouldn't adjust the price because
18 they've already paid for it, I think that bus has
19 already left the barn. You know, we -- we have to make
20 those adjustments.

21 And, you know, there's two different
22 pieces. We need to be clear about what we're talking
23 about. There's -- there's the firm load shed that
24 occurs -- and John described it aptly -- it occurs in
25 Step 3. That's a no-brainer. You have to make

1 adjustments for that. That's clearly out of merit.
2 There's nothing commercial about it. It's a last-ditch
3 effort to keep their frequency up, and it's specified in
4 the protocols and operating -- operating guides for that
5 purpose.

6 The other load actions, to the extent that
7 the ISO directs it and it's not the result of commercial
8 activity within SCED, and it's not part of the price
9 setting, then we have to make adjustments for it; and
10 the Commission's already told us that.

11 MS. STEPHENSON: Okay. Clayton and then
12 Seth.

13 MR. COCHRAN: I think Clayton's card is
14 still up from the last time. Anyway, go ahead.

15 MR. GREER: I keep getting skipped. I
16 never got to my issue. I was just -- I'm wondering what
17 the problem is here. I'm trying to figure out -- you
18 know, I mean, if we're wanting to make adjustments for
19 firm load shed, because that -- the problem that we had
20 with ERS and LRS is they're not immediately coming back.
21 Whenever we have firm load shed directed by the TDSP,
22 that comes back. Those are, you know, feeders that have
23 been de-energized and the load comes back automatically.
24 It's your refrigerators and freezers and
25 air-conditioners and all that stuff. So we don't have

1 the lingering problem that we have with some of these
2 industrial loads where they come down on a process and
3 can't start it back up. So we should be into and out of
4 that situation before we come off of the cap.

5 So, I mean, we can make adjustments, but
6 it doesn't make it any more cappier (sic) than -- than
7 the cap. So I'm -- I'm wondering if we don't really
8 have a problem here.

9 MS. STEPHENSON: I'm going to agree with
10 you, Clayton. I don't know if we really have an issue
11 here, but go ahead, Seth.

12 MR. COCHRAN: Yeah. I was just going to
13 say, I can't think of an example where we're in EEA 3
14 and prices should not be at the cap. I just -- I can't
15 think of an example where -- if we have a systemwide
16 offer cap and we have that to reflect scarcity
17 conditions, EEA 3 would be the time that we're in
18 scarcity conditions, and that's the time when we want
19 price signals to reflect that.

20 So I mean, this sort of reminds me of
21 NPRR508. Really I think we should just have some
22 protocol that says we're in EEA 3. We should be putting
23 the cap. I think it's really immaterial whether we can
24 count it or whether we can't count it and all of those
25 details.

1 UNIDENTIFIED MALE SPEAKER: Kenan?

2 MR. OGELMAN: Yeah, I guess I -- I've got
3 two points. I think the changes that we made with 598
4 pretty much assure you that you're at the cap. The only
5 time this is going to kick in is there's going to be
6 this adder when you essentially over curtailed load or
7 something like that and -- and you're -- you're over
8 counting it. I just -- I can't see where in EEA 1, 2,
9 or 3 or -- I mean, all the 598 changes pretty much got
10 us where we need to be on this.

11 Now in terms of the Commission
12 instruction, I mean, I went back and listened to the
13 tape again, and it said, ERS, LRS, and 0 to LSO RUC.
14 Those were the instructions that we got. And we can
15 throw other things in there, but if you're saying we're
16 not being responsive to the Commission in terms of what
17 they asked for, this is something extra. This is not on
18 the list of things that they gave us.

19 So I'm -- I'm not seeing the case made to
20 do this change. I think it's only upside risk to load
21 just to pay more for circumstances where it's actually
22 not -- the price should not be at the cap because we
23 missed a recall or did something strange. And I don't
24 think that adjustment is appropriate.

25 MS. STEPHENSON: Eric?

1 MR. GOFF: So the -- I still fail to see
2 the downside from making sure that the price is at the
3 cap during EEA 3. And it's great that we already have a
4 market design that that's very likely to happen, but we
5 don't have a market design where it will happen, because
6 just to walk through the math again, if you shed
7 3,000 megawatts of load, that's 3,000 megawatts fewer
8 for SCED to solve, 3,000 megawatts more that are
9 available to ORDC, and we could get to a situation where
10 we solve the problem because we've got a lot less load
11 to solve for. And if that results in much lower prices
12 than are appropriate for shedding firm load, I don't
13 know why we would want to do that.

14 And so if all it takes is adding in D,
15 firm load shed, and then most of the time that won't be
16 in effect because most of the time, ORDC takes care of
17 it, great. There's a minimal incremental impact. Let's
18 do it.

19 MS. STEPHENSON: Okay. Any other comments
20 on this topic?

21 (No response)

22 MS. STEPHENSON: So I think one of the
23 options that could be discussed here is exactly what
24 Eric is saying, is you add firm load shed during EEA
25 Step 3 events as a consideration. I hear both sides of

1 that, so okay. Anything else on that?

2 (No response)

3 MS. STEPHENSON: All right. I would like
4 to move to the load resources -- no, keep that slide
5 up -- the last bullet on here, because I'd like to hear
6 from ERCOT, maybe get Cy or John to talk a little bit
7 about how you would insert these load resources, pretty
8 much load acting as responsive, in -- with this proxy
9 curve. This is kind of a new concept, so I want to make
10 sure -- this hasn't been discussed at RATF before, so I
11 want ERCOT to weigh in on this.

12 UNIDENTIFIED MALE SPEAKER: The way I'm
13 reading this is, it's not -- not really a proxy offer.
14 It's a proxy bid to buy. And so what it does is that
15 instead of the -- so if you look at it for the deployed
16 load resources and ERS, it's -- it's demand that was
17 withdrawn from the system. You added back the GTBD, and
18 in 626 it's just a vertical. If you have on your X axis
19 the megawatts and the Y axis is the price, it's a
20 vertical line saying that the price for that demand is
21 fixed, and I need to serve that no matter what.

22 With this change, all that you're doing is
23 that the vertical demand curve has got a little bit of
24 elasticity at \$500.

25 MS. STEPHENSON: Yes.

1 UNIDENTIFIED MALE SPEAKER: And it is
2 doable because we are already implementing the same kind
3 of demand elasticity with controllable load resources
4 coming in first, and we will have some experience in how
5 that behaves. So -- so conceptually, it's doable.

6 MS. STEPHENSON: Okay.

7 UNIDENTIFIED MALE SPEAKER: And the fact
8 that there's no new submission, if it is just an
9 administrative \$500, there's not that much amount of IT
10 stuff that needs to be done in terms of submission or
11 something. We can just have it in the engine itself.

12 MS. STEPHENSON: Okay. Great.

13 John, a question?

14 MR. HOUSTON: You would add it in as --
15 based on their breaker status. Right? Like the load
16 resources --

17 UNIDENTIFIED MALE SPEAKER: So for the --

18 MR. HOUSTON: -- telemetered
19 communications --

20 UNIDENTIFIED MALE SPEAKER: Yeah, the net
21 bar consumption that -- before the event happened,
22 whatever that was, we'll have to come up with the same
23 scheme. I mean, I think that part was described in the
24 various proposals whether it was removing that capacity
25 from ORDC or adding it to GTBD in 626. You get the same

1 thing based on telemetry. And for ERS --

2 (Simultaneous discussion)

3 MR. HOUSTON: I want to make sure --

4 UNIDENTIFIED MALE SPEAKER: -- it will be
5 X amount instructions that go out.

6 MR. HOUSTON: Yeah, and I was just wanting
7 to make sure that was pointed out, is what --

8 MS. STEPHENSON: Okay. Thank you.

9 Bill?

10 MR. SMITH: Cy, the -- the implementation
11 strategy that you're describing would not materially
12 change the time to implement 626.

13 UNIDENTIFIED MALE SPEAKER: No, but I
14 think 626 as it is, we -- we -- we haven't really
15 done -- we have to talk to the various groups inside
16 ERCOT, but it should not -- this is a small delta --

17 MR. SMITH: Okay.

18 UNIDENTIFIED MALE SPEAKER: -- to the
19 entire 626.

20 MR. SMITH: Okay. Thanks.

21 UNIDENTIFIED MALE SPEAKER: The bigger
22 challenge for 626 in terms of implementation is -- is
23 setting up a third -- a pricing run, and that requires
24 extra storage and -- and all the table definitions and
25 all that, so that will be the major chunk of it and what

1 needs to be posted. This is a small delta in comparison
2 to that.

3 MS. STEPHENSON: Amanda?

4 MS. FRAZIER: Cy, if we were to -- so
5 rather than doing a straight-line bid to buy at 500, if
6 you had a curve in there, so you had -- it was
7 representative of more than just one price at which all
8 1400 megawatts of load is willing to shed, is that also
9 relatively workable?

10 UNIDENTIFIED MALE SPEAKER: The -- the
11 challenge with that would be is -- let's say that based
12 on a frequency event and it's -- it's kind of localized,
13 only a certain number of load resources trip off, what
14 price would you want on that, because if you're -- if
15 you're releasing that I want to drop demand curve for
16 this one, it's a megawatt and a price point. So you
17 have to say how many megawatts you want at this price,
18 how many megawatts you want at that price; and depending
19 on what was curtailed, it's doable. It just -- we just
20 need to work out the details. And it's the same delta.

21 MS. FRAZIER: Right.

22 UNIDENTIFIED MALE SPEAKER: So -- so
23 having a demand curve rather than a horizontal one is
24 not an issue.

25 MS. FRAZIER: Right. So the complication

1 is, I think we probably would all agree, it can't be the
2 case that every single megawatt of load resources is
3 valued at \$500, but because there's not a specific bid
4 to buy for each of those resources, when you have
5 localized resources that are shed, how do you determine
6 which part of the curve to -- to put on there.

7 And I think -- I understand the
8 complication, but I'm not sure I'm comfortable that \$500
9 is the right relative average price for all 1400 of
10 those megawatts.

11 UNIDENTIFIED MALE SPEAKER: Yeah. The way
12 you look at this one is that you kind of say that as far
13 as pricing that load resource deployment, is if six --
14 you just look at it as one aggregate load resource and
15 build a demand curve for that one. And that's what SCED
16 is going to price out, not the individual ones.

17 MS. STEPHENSON: I'm going to jump -- I
18 just have a question about what you just said, Cy.

19 So when you deploy it, you'll be just
20 climbing up that curve --

21 UNIDENTIFIED MALE SPEAKER: No, no.

22 MS. STEPHENSON: -- as you do -- okay.
23 Help me understand that.

24 UNIDENTIFIED MALE SPEAKER: Okay. So the
25 supply curve -- I guess you'll have to see my flailing

1 hands. This is the supply curve. I'm not touching the
2 supply curve. This is your demand curve. Right? Now
3 it's a vertical line in 626 as written. All that you'll
4 do is you'll have a kink over there.

5 MS. STEPHENSON: Yeah, but if we were
6 going to do it from 500 to a thousand dollars --

7 UNIDENTIFIED MALE SPEAKER: To a thousand,
8 it'll be like a slope like that.

9 MS. STEPHENSON: Okay. But just
10 distribute it linearly?

11 UNIDENTIFIED MALE SPEAKER: Yeah.

12 MS. STEPHENSON: Okay. Got it.

13 UNIDENTIFIED MALE SPEAKER: I mean, you
14 could -- you don't have to make it a fixed line. You
15 could have multiple points on it, and we'll just
16 linearly go along that line.

17 MS. STEPHENSON: Got it. Thank you.
18 Sorry to cut in front of you guys.

19 Eric and then Bill.

20 MR. GOFF: So the instance you described
21 would -- potentially problematic is on under-frequency
22 load shed when you might have a localized frequency
23 event. Is that -- I just want to make sure I understand
24 that correctly.

25 UNIDENTIFIED MALE SPEAKER: Well,

1 typically what's -- what we have seen in certain cases
2 is that we think that the frequency has gone below, but
3 not all load resources --

4 MR. GOFF: Right.

5 UNIDENTIFIED MALE SPEAKER: -- respond.

6 And then you look at the high-speed data recordings --

7 MR. GOFF: Yeah.

8 UNIDENTIFIED MALE SPEAKER: -- it looks
9 like the frequency in this area was below the threshold,
10 and all the load resource bid to respond over here, but
11 maybe out in West Texas or something, maybe the
12 frequency took some time; but when these guys tripped
13 off, the frequency recovered.

14 MR. GOFF: Yeah.

15 UNIDENTIFIED MALE SPEAKER: So it never
16 went there. So all that we will do is take those
17 megawatts and create this elastic demand curve. This --
18 the other load resource is never deployed if you're
19 looking at the two-second telemetry.

20 MR. GOFF: So -- but it -- in that
21 instance when you have, you know, these UFR loads that
22 are operating maybe a little bit too conservatively or
23 maybe you have some -- for some bizarre reason, you have
24 a regional, you know, frequency, that has not happened
25 in every deployment of UFR. Right? It's pretty -- it's

1 pretty exceptional when you have a localized frequency
2 event?

3 UNIDENTIFIED MALE SPEAKER: I don't know
4 of a localized frequency event --

5 MR. GOFF: Right.

6 (Indiscernible)

7 MR. GOFF: Right. And there have been a
8 couple times where you've had one trip off earlier
9 because, you know, there was some setting on their
10 machine, but typically --

11 UNIDENTIFIED MALE SPEAKER: Well, there
12 are -- there are -- you know, there's a requirement in
13 the protocol that you come off of (indiscernible) --

14 MR. GOFF: Yeah.

15 UNIDENTIFIED MALE SPEAKER: There are a
16 few that --

17 MR. GOFF: Slightly high set.

18 UNIDENTIFIED MALE SPEAKER: -- slightly
19 higher --

20 MR. GOFF: Yeah.

21 UNIDENTIFIED MALE SPEAKER: -- make sure
22 to meet that --

23 MR. GOFF: Yeah.

24 UNIDENTIFIED MALE SPEAKER: We've hit that
25 a time or two.

1 MR. GOFF: Yeah.

2 UNIDENTIFIED MALE SPEAKER: That may be
3 what you're -- but those are during frequency events not
4 really -- frequency events --

5 UNIDENTIFIED MALE SPEAKER: Scarcity --

6 MR. GOFF: Yeah. And then during --
7 during scarcity deployments, you have it divided into
8 Group 1 and Group 2, and you can do one or both.

9 UNIDENTIFIED MALE SPEAKER: Yeah.

10 MR. GOFF: So the instance of a problem is
11 kind of an exceptional case. Right?

12 UNIDENTIFIED MALE SPEAKER: Yeah.

13 MR. GOFF: Okay.

14 UNIDENTIFIED MALE SPEAKER: In all cases
15 we will know exactly -- well, based on telemetry that's
16 coming from the load resources, how much -- back to
17 GTBD.

18 MR. GOFF: Right.

19 MS. STEPHENSON: Okay. Bill, you were
20 next.

21 MR. SMITH: Just clarifying the curve
22 concept that's being discussed here is we would -- for
23 load resources, the deployed amount of load resources
24 would be -- would -- would be inserted as a virtual bid
25 into the pricing runs from some beginning price to some

1 ending price and not the total procured -- let's say we
2 bought 1400 megawatts of -- of noncontrollable load in
3 the day-ahead market. We wouldn't have a static curve
4 from beginning point to 1400. It would only be what's
5 deployed. So if we only shed 500, the curve would be
6 beginning point to end point on price from 0 to
7 500 megawatts?

8 UNIDENTIFIED MALE SPEAKER: That's right.

9 MR. SMITH: Okay. Thanks.

10 MS. STEPHENSON: Okay. Thanks.

11 Amanda?

12 MS. FRAZIER: I want to ask a point of
13 clarification. It's -- it's my NPRR, so I should
14 probably know the answer to this. And I've -- and I've
15 looked through the NPRR language, and I just want to
16 make sure that ERCOT agrees with my interpretation
17 because ERCOT helped with the language. That's not even
18 true. Cy wrote the language. You guys all saw it at
19 RATF.

20 On deployment of load resources carrying
21 RRS with -- set on high-set, under-frequency relays,
22 those can be tripped by frequency obviously, or they can
23 be deployed in an EEA 2. Both of those in the protocols
24 are called deployments. And so my understanding is that
25 both of those instances would also be captured in the

1 third SCED run. It's -- it's not just when the -- when
2 the UFRs are deployed during SCED step two. Right?

3 UNIDENTIFIED MALE SPEAKER: Even if it's a
4 frequent deployment, it's a reliability action, so it is
5 included in the third SCED run.

6 MS. FRAZIER: Okay. Thank you.

7 MS. STEPHENSON: Kenan?

8 MR. OGELMAN: Okay. So let me follow up
9 with what Cy said. Okay. That -- then that doesn't
10 make sense to me. So the frequency events aren't about
11 systemwide reliability. I mean, what -- what's the
12 objective here in terms of -- of the pricing? That --
13 that doesn't fit.

14 So let's make an analogy to the
15 adjustments that we would have made with the floors.
16 The frequency deployment would not have triggered the --
17 the floors in the past. So that logically does not make
18 sense to me that you would move up -- up the offer curve
19 for a frequency deployment, which is not a lack of
20 capacity or it's just an inability to get to -- get to
21 the ramp energy. Right? So to me that -- I'm seeing a
22 disconnect there, and that doesn't make sense to me.

23 UNIDENTIFIED MALE SPEAKER: Okay. I
24 guess -- actually, there's another thing that I didn't
25 answer on Amanda's thing, is right now, I think Mark

1 kind of reminded me is, we may not know that the load
2 resource has been deployed at that instant of time
3 unless we're looking at --

4 UNIDENTIFIED MALE SPEAKER: Under
5 frequency.

6 UNIDENTIFIED MALE SPEAKER: -- on under
7 frequency.

8 So -- so one thing is we'll -- if we go
9 down that path, we'll have to figure that out.

10 And coming to Kenan's point, I think
11 that's for, I guess, the stakeholder process to decide
12 on -- on what conditions load resource deployments needs
13 to be considered in this third pricing run.

14 MR. OGELMAN: And by the way, the
15 generators that you would be giving this additional
16 money to has nothing to do with what is triggering -- or
17 necessarily triggering the frequency deployment. So not
18 only is there a -- kind of the policy thing, but then
19 the dollars aren't going to the right places either in
20 that instance or not necessarily going to the right -- I
21 mean, it's -- it just kind of depends on where -- where
22 offers are and stuff. So --

23 UNIDENTIFIED MALE SPEAKER: I'll defer to
24 you guys. The only thing I was thinking is that
25 frequency is a system reliability measure, 60-hertz.

1 And if something happens because we are deviating from
2 that, protocols that are reliability deployment; but
3 I'll -- I'll let you guys make a decision on that. But
4 there's one thing is that we still need to work out on
5 how we detect it. If we go down that path, we need to
6 figure out how to detect that and put it in the SCED.

7 MS. STEPHENSON: Okay. Katie is next.

8 MS. COLEMAN: Kenan said a lot of what I
9 was going to say, but, you know, we're viewing this as a
10 scarcity pricing initiative. And we were envisioning
11 doing this third SCED run during the manual deployment
12 during EEA 2 and not for any time it's tripped for
13 under-frequency. And like Kenan said, that's consistent
14 with what we did on the price floor, so I feel like that
15 shouldn't be very controversial. And I think we'd like
16 to see this limited to just the scarcity situations.

17 UNIDENTIFIED MALE SPEAKER: I just have
18 one comment. So let's say there is a frequency event
19 and the load comes off because of the relay and it's off
20 for maybe an hour, hour and a half. During that time,
21 do you need any price correction? Because I don't -- I
22 don't -- I would like them to come back, but they
23 have -- the protocols allowed them to -- one and a half
24 hours to come back. So during that time, is the price
25 formation correct or not?

1 MS. FRAZIER: I think it's my turn. My --
2 I mean, I'm going to repeat what Cy said. I -- I agree
3 that it's reliability deployment, and I think the reason
4 that the price floors didn't cover it is because the
5 price floors didn't cover any version of load that was
6 carrying RRS because they don't have bids in SCED and so
7 there wasn't a way to put a -- to address a price for --
8 with respect to these UFRs.

9 And I think the issue for -- for us is on
10 the restoration time because now you -- once you've
11 deployed those UFRs, regardless of whether you deployed
12 them for frequency or you deployed them in EEA 2, you no
13 longer have them available to provide RRS, but you --
14 they're not being treated for price at all. And so if
15 they're deployed by frequency, I think they should be
16 treated the exact same way as if they're deployed by
17 ERCOT.

18 And I think you can -- I think there's an
19 obligation to update your ancillary service resource
20 schedule for the UFRs even if they're tripped by
21 frequency, and so I think that would be the way that
22 ERCOT would have to track what was deployed and
23 undeployed.

24 MS. STEPHENSON: And that is correct.

25 Katie and then Kenan.

1 MS. COLEMAN: I actually have a question,
2 because my understanding of how this -- and this is for
3 Cy or John probably.

4 My understanding of how this virtual offer
5 would work is that if the energy from the LaaR isn't
6 needed, that offer isn't really triggered in the third
7 SCED run anyway. And so I'm wondering if, during a UFR
8 trip, it might be that this doesn't make that much of a
9 difference because you don't need the energy. So could
10 somebody speak to that?

11 UNIDENTIFIED MALE SPEAKER: If -- let's
12 put it this way. If there's sufficient capacity from
13 the -- on the supply side from the generators and all
14 the offers are below 500, even if it's a UFR trip, you
15 won't see anything happening. The prices will be below
16 that.

17 MS. STEPHENSON: Okay. Does that --

18 UNIDENTIFIED MALE SPEAKER: That's
19 typically what happens most of the time anyway.

20 MS. STEPHENSON: Yes. That's fine.

21 MR. OGELMAN: So I guess -- I mean the
22 thing I'm thinking of, based on what Amanda said, is
23 okay, so you trip these UFRs, reserves on the -- you
24 adjust your COP, reserves on the system go down, ORDC
25 adder goes up, so -- so why -- why am I adjusting twice?

1 MS. STEPHENSON: Wait.

2 MS. FRAZIER: You're not --

3 (Simultaneous discussion)

4 MR. OGELMAN: Load went down, ORDC went
5 up, and then I'm thrown another adder in for the
6 deployment, so I got -- I'm increasing my ORDC adder,
7 and then I'm throwing another adder in.

8 MS. FRAZIER: Your ORDC adder stays flat.

9 MR. OGELMAN: No, I've taken -- I've
10 taken --

11 MS. FRAZIER: You've taken it out, and
12 it's all set by the --

13 MR. OGELMAN: There's less RRS on the
14 system.

15 MS. FRAZIER: And less -- and less load on
16 the system by an exact same amount.

17 MR. OGELMAN: Okay. So, again, then
18 you're throwing this other adder in.

19 MS. FRAZIER: It's -- I'm not throwing an
20 adder in. I'm accounting for the fact that you've
21 deployed the LRS, and so you need to -- you need to have
22 SCED reflect the fact that you've lost that reserve
23 availability. And it's -- it's not necessarily going to
24 be restored for up to three hours without any price
25 effect.

1 MR. OGELMAN: But -- and at the same
2 time -- at the same time, there's going to show less --
3 until those come back, there's less RRS on the system as
4 well, right, until those come back?

5 MS. FRAZIER: Uh-huh.

6 MR. OGELMAN: So your reserves are going
7 to be shorter.

8 MS. FRAZIER: Uh-huh.

9 MR. OGELMAN: So --

10 MS. FRAZIER: It's to try to get --

11 MR. OGELMAN: It's all in --

12 MS. FRAZIER: -- a price effect for the --

13 MR. OGELMAN: It's all in balance so far.

14 MS. FRAZIER: -- for the load resource.

15 MR. OGELMAN: So -- so I got a plus and
16 a -- and a minus. Everything's in balance, and then I'm
17 throwing another adjustment in. And for frequency,
18 that -- I guess I'm -- I'm not following the logic for
19 that.

20 MS. FRAZIER: What's not in balance is
21 that SCED, except if you do this third and fourth SCED
22 run, sees a zero price for that load. And now we're
23 submitting a price for the load at whatever bid we
24 determine is the appropriate proxy bid.

25 MR. OGELMAN: But at the same time, ORDC

1 is bigger than it was before the deployment.

2 MS. FRAZIER: ORDC is flat because ORDC
3 loses the reserves but also loses the load.

4 MS. STEPHENSON: Yeah, so I think it's not
5 a double adder.

6 Are you there, Kenan? Okay.

7 Bill is next and then Walter.

8 MR. SMITH: I think we're -- we're
9 getting -- I think we're getting there, but I just want
10 to kind of reiterate the point that Amanda was making,
11 and I think Katie mentioned it as well, is if we're --
12 we're concerned -- if the item we're talking about is
13 load resource deployments for frequency trips and the --
14 you know, the point of what we're doing here is making
15 sure that we have accurate price formation. So if we
16 trip a load resource when there's ample capacity, in the
17 SCED pricing run, that -- that curve won't even come
18 into effect. So it's already -- in my mind, it's
19 already managed by the amount of capacity that's going
20 to be counted in the SCED run, so it's going to take the
21 existing offers.

22 And if we have sufficient capacity when --
23 when we have a frequency trip -- like January 18th comes
24 to mind when we lost a large unit, but we had
25 10,000 megawatts of reserves -- then there will be no

1 price adjustment to be made because there's enough
2 capacity on the system. I think that's what the concern
3 that I heard was that we would be actually adjusting
4 price up when we didn't need to, but the offer stack
5 should already -- should already be telling us where
6 this capacity resides and would manage that price
7 adjustment accordingly, so I -- I think we're okay.

8 UNIDENTIFIED MALE SPEAKER: Yeah, the only
9 thing I wanted to mention is -- because I think it does
10 affect price, depends on the conditions, whether you
11 have a shortage or not, and the likelihood is you won't
12 and you'll have a lot of capacity.

13 And the main thing I want to, you know,
14 make sure everybody realizes, I think this happens like
15 three times a year. So, you know, as a -- as a material
16 effect, I'd be very surprised it has a material effect.

17 MS. STEPHENSON: Okay. So right now, it
18 looks like it's all the load resources being deployed
19 for frequency reasons or the manual deployment.

20 Are you okay down there on that side? I'm
21 just making sure.

22 MR. OGELMAN: I think Amanda and Bill are
23 correct --

24 MS. STEPHENSON: Okay.

25 MR. OGELMAN: -- in what -- how they --

1 how it would work, and I think I'm -- I'm fine with
2 that.

3 MS. STEPHENSON: Okay. Katie?

4 MR. OGELMAN: If that's worth it.

5 MS. COLEMAN: I mean, I still, you know,
6 have concerns about the idea that we need to offset the
7 impact of any reliability action at any time whether it
8 relates to scarcity or not; but in this particular
9 scenario, I don't think it's going to make a difference,
10 so I think we're okay with that.

11 MS. STEPHENSON: Okay. Any discussion
12 on -- at the \$500 level? Amanda, then we'll get to
13 Katie.

14 MS. FRAZIER: I understand the principle
15 behind the compromise that if you don't have a virtual
16 bid in at all, then you are just relying on whatever the
17 generator stack is to set the price for -- for the load,
18 which may or may not be representative of their
19 willingness to -- to curtail. But I am concerned that
20 we've just picked 500 out of the blue, and without --

21 (Laughter)

22 MS. FRAZIER: It's not out of the blue.
23 It's out of the Brattle report or something?

24 And so it sounds low to me. And I realize
25 that there are a number of industrial loads that have a

1 fairly low value of lost load or opportunity cost of
2 turning off. And so for some of them, I'm sure 500 is
3 even higher than what their opportunity costs are, but
4 I'm not sure it's reflective of all 1400 megawatts of
5 RRS that we -- that we buy. And so I'd like to see it
6 be -- be a little higher.

7 The other -- the other issue that I have
8 is really with the RUC floors, that we set the energy
9 price at a thousand. And, you know, we had some of
10 these -- we had some events this winter where gas prices
11 got out of control, and we talked about that price
12 floors of a thousand dollars might interrupt some of
13 those offers.

14 I think it's also the case -- I know it's
15 the case for some quick start units that have to
16 amortize their start costs into their expected
17 deployment that offers are higher than a thousand
18 dollars, and so the RUC floor being at a thousand also
19 gives me a little bit of heartburn. And I would be more
20 comfortable picking -- picking something around \$500 for
21 the load resources if we move to boot the RUC energy
22 floor up perhaps back to the \$3,000 offer cap that we
23 had back in 2011 or something that gets it substantially
24 above where you'd ever see a competitive offer come in.

25 And a couple of reasons behind that. One,

1 you don't ever want RUC to interrupt the competitive
2 offer; but second, we really want to start working on
3 making sure the incentives are correct so that we are
4 having less and less RUC. And I think the incentives
5 are correct on the generator side, but I'm not sure
6 they're correct on the load side -- on the load side yet
7 to ensure that there's going to be that competitive
8 solution in the day-ahead market to get less and less
9 and hopefully at some point no RUC for capacity.

10 UNIDENTIFIED MALE SPEAKER: Katie?

11 MS. COLEMAN: A couple things. The first
12 point about the \$500 price for the virtual offer for the
13 loads, that was based on historical data that showed
14 that most of the loads were coming off between 350 and
15 500, so that's on the high end of that.

16 That being said, I've had discussions with
17 some of the people in the room who are interested in
18 having a curve instead of a flat price for this virtual
19 offer, and I think if we straddled the \$500 evenly on
20 either side and went from like three to seven, that's
21 something that we could live with.

22 On the RUC piece, I understand what you're
23 saying, but I think \$3,000 is really overshooting. If
24 we're just trying to get above some of the offers that
25 we have seen, I think you're looking at more like the

1 1200 to \$1500 range, not -- not 3,000.

2 And my concern with going much higher is,
3 now that we're doing this 0 to LSL adjustment, if you
4 start keeping the RUC from being deployed until prices
5 are 3,000, that adjustment's going to be active a lot
6 more of the time and there's going to be a lot more
7 uplift associated with that than I think we've been
8 talking about. So I am concerned about going much
9 higher than 12 or 1500 on the RUC floor.

10 UNIDENTIFIED MALE SPEAKER: Eric?

11 MR. GOFF: I think that it's a little bit
12 weird to imagine a aggregate offer curve that includes
13 1400 megawatts all at \$500. I don't know we would see
14 that in a natural market, so I would prefer for there to
15 be some sort of curve to that. And I understand there's
16 potential -- you know, need to assign, you know, that to
17 different points of the curve. And if it settled out
18 around the same average price, I think that would be
19 okay; and I wonder if the compromise advocates are
20 comfortable with that. For example, it could be
21 something like 300 to 700 if you have the 500 median
22 point.

23 MS. COLEMAN: I think Kenan is not paying
24 attention, but -- but I think I mentioned earlier, I
25 think TIEC can live with that.

1 UNIDENTIFIED MALE SPEAKER: Brad, go
2 ahead.

3 MR. BRAD JONES: So let me fill a void,
4 not on this exact same topic but on the previous one,
5 the issue about frequency shed load. We're going to
6 have to make sure that we have enough information
7 associated with that. It may require some additional
8 telemetry points. So all I wanted to make sure everyone
9 knew is that as we go through the IA, we may come back
10 depending upon how much that element costs to get that
11 additional level of information and re-raise that issue
12 to you just to make sure that you're aware of the cost
13 of it.

14 UNIDENTIFIED MALE SPEAKER: Anything else
15 on this slide?

16 MS. STEPHENSON: Yeah, let me walk through
17 the changes real quick.

18 UNIDENTIFIED MALE SPEAKER: Okay.

19 MS. STEPHENSON: Okay. So we tried to add
20 some clarification here on the slide so everyone's on
21 the same page.

22 So the way 626 was done, there was
23 removal -- when you look at A, B, and C, there was the
24 firm load as well as the load acting as responsive. So
25 those are actually now removed from that adjustment,

1 right now the way it is, and we put a proxy bid to buy
2 for those load resources -- and I think we've all said
3 it doesn't matter if there's a frequency deployment or a
4 manual deployment, they will all be in -- right now,
5 it's at \$500.

6 Everyone understand the proposal? I just
7 want to make sure there's not any confusion on the way
8 it would work. That's what I was thinking.

9 Amanda, go.

10 MS. FRAZIER: So the way 626 was written
11 with respect to Load RRS is there is a treatment to the
12 generation to be dispatched value representative of the
13 load, and it just -- the pricing piece of it just worked
14 on whatever the generation offer stack was, but you
15 still had the restoration piece and you had the
16 generation to be dispatched that was adjusted as part of
17 that.

18 My original understanding was that the
19 compromise was that you would still make that adjustment
20 to generation to be dispatched, you would just have the
21 offer represent the load resources' willingness to
22 curtail. Is that not part of the compromise?

23 MS. STEPHENSON: That's not part of the
24 compromise.

25 MS. FRAZIER: Then there's no compromise.

1 MS. STEPHENSON: Well, and I'm going to
2 ask -- that's the way -- I'm looking at Kenan to
3 confirm, but are you guys there? Do we need to break
4 and get back to this point?

5 MR. OGELMAN: Yeah, I think -- I think we
6 need to get back to this point.

7 MS. STEPHENSON: Okay.

8 MR. OGELMAN: Because, I mean, so the
9 thought process was just to not do a third SCED run
10 adjustment for LRS.

11 MS. STEPHENSON: Correct.

12 MR. OGELMAN: And substitute that with an
13 offer for LRS.

14 MS. STEPHENSON: Yes.

15 MR. OGELMAN: However, we need to make
16 sure that that offer gets taken, so there's --
17 there's -- there's a gap. But I mean --

18 MS. STEPHENSON: How does it show up in
19 the third or fourth --

20 MR. OGELMAN: -- when we edited the
21 document, LRS went out completely.

22 MS. STEPHENSON: Correct, of that Section
23 6.5.7.3.1.

24 MR. OGELMAN: Yeah, of the basket of
25 stuff.

1 MS. STEPHENSON: Yes. Okay. So we need
2 to -- let's take -- this has been a lot of fun, so let's
3 take a ten-minute break, I think. Let's get ERCOT and
4 some of the SMEs to talk about this and get back to this
5 and start back up at 11 o'clock.

6 (Recess taken)

7 MS. STEPHENSON: All right. Are we ready
8 to get back or need more time? I think we're good.
9 Okay. Let's get back to it. I think we have some
10 clarification on the compromise. Let's go.

11 UNIDENTIFIED MALE SPEAKER: I like the TAC
12 gavel. That's good.

13 MR. BRAD JONES: Isn't that cool? That's
14 a new addition.

15 UNIDENTIFIED MALE SPEAKER: It just
16 says -- oh, it just says TAC, ERCOT TAC.

17 MS. STEPHENSON: Isn't that nice?

18 UNIDENTIFIED MALE SPEAKER: Yeah.

19 MS. STEPHENSON: Eric got it for me.

20 UNIDENTIFIED MALE SPEAKER: Solid cherry
21 for this? Solid mahogany?

22 MS. STEPHENSON: Okay.

23 UNIDENTIFIED MALE SPEAKER: Just don't get
24 it wet.

25 MS. STEPHENSON: I know. Don't want to

1 misuse the gavel.

2 Okay. So I think where we are now is
3 after having some discussions with ERCOT, we are going
4 to -- for this load resource to take an impact at that
5 \$500, we do need to adjust how we're doing the
6 calculation and remove the controllable load, so we'd
7 add a "D" here. Could you add a "D," if you don't mind?
8 Let me get the right term.

9 UNIDENTIFIED MALE SPEAKER: The letter
10 "D"?

11 MR. BRAD JONES: Yeah, letter "D" in the
12 upper section.

13 MS. STEPHENSON: Yes.

14 UNIDENTIFIED MALE SPEAKER: I see. You
15 mean Bullet D?

16 MS. STEPHENSON: And we would put, I
17 guess, deployed load resources other than controllable
18 load resources. Is that right? That should get it.
19 Right? And then we would keep the proxy -- or the proxy
20 bid to buy at the 500 level, and that should make the
21 impact we've been discussing.

22 Go ahead, Eric.

23 MR. GOFF: I think I agree with what
24 you're intending to do.

25 MS. STEPHENSON: Uh-huh.

1 MR. GOFF: But loads in SCED is also a
2 load resource, so that would be a deployed load
3 resource.

4 UNIDENTIFIED MALE SPEAKER: Yeah, but it
5 would be --

6 MS. STEPHENSON: It's a controllable load
7 resource.

8 MR. GOFF: It's always a controllable load
9 resource? Okay.

10 MS. STEPHENSON: So we're good? Okay.

11 I dare to say, we may have something here.
12 But any other questions on the proposal? There will be
13 no changes to ORDC with this proposal. It'll all be the
14 NPRR626.

15 Mr. Goff, sorry.

16 MR. GOFF: Is there a motion from someone
17 on that?

18 MS. STEPHENSON: We need to wait till TAC
19 starts --

20 MR. GOFF: Okay. Right.

21 MS. STEPHENSON: -- to do anything.

22 MR. GOFF: And then I think there was
23 interest on a curve for Bullet 4 from 300 to 700. I
24 heard interest from the advocates for this proposal that
25 there would be -- that would be acceptable.

1 (Indiscernible discussion)

2 MS. STEPHENSON: Okay. There is a deal.
3 Is that okay with everyone? 300 to \$700 curve? I see
4 people nodding.

5 MS. FRAZIER: Is it a straight curve?

6 MS. STEPHENSON: Oh, my goodness.

7 MS. FRAZIER: Two points on this curve?

8 MR. GOFF: Well, you've got two groups of
9 load resources. Right? So you have to figure out --

10 UNIDENTIFIED MALE SPEAKER: Well, but they
11 don't -- they don't --

12 MS. STEPHENSON: No. Go ahead.

13 UNIDENTIFIED MALE SPEAKER: They don't
14 deploy the A and B groups the -- just based on price or
15 anything like that. It's -- so there would have to be
16 some more thought about how it was -- how -- what's --
17 who's the 300 and who's the 700 on that if we're not
18 going to add anything for adding in a price on the bid.
19 And so that's not --

20 MS. FRAZIER: And I think the --

21 UNIDENTIFIED MALE SPEAKER: I don't think
22 it's doable.

23 MS. FRAZIER: -- easier way to do it is
24 the -- the amount of deployed megawatts on a curve with
25 two points, the -- the first megawatt is at 300 and the

1 last megawatt is at 700.

2 UNIDENTIFIED MALE SPEAKER: Yeah.

3 UNIDENTIFIED MALE SPEAKER: It's a pricing
4 run, so that's all we need to do.

5 UNIDENTIFIED MALE SPEAKER: Yeah.

6 MS. STEPHENSON: Yeah. Okay. So it's a
7 linear curve from 300 to 700.

8 Could we change that, Kelly, if you don't
9 mind? Last bullet. So bid to buy to curtail at a
10 curve -- at a linear curve starting -- what -- that's
11 true -- starting at 300 to 700.

12 All right. I do think we're going to have
13 to have more debate on how we back out of this, but we
14 can get that all done, I think, in the NPRR piece so --
15 Amanda?

16 MS. FRAZIER: Can we add to -- to this
17 proposal a increase in the RUC energy floor from the
18 current \$1,000 to \$1500? Kelly is willing to say -- to
19 type it, I can see.

20 MS. STEPHENSON: So right now, the RUC --
21 does everyone understand the RUC -- this has nothing to
22 do with NPRR626, so this would be a separate NPRR, which
23 would come in and change the RUC floor, which is now at
24 a thousand dollars, to \$1500.

25 MS. FRAZIER: We could write it into

1 NPRR626. You just have to add a section.

2 MS. STEPHENSON: Oh, it's just not in
3 right. Yeah, we'd have to -- we could make comments.
4 You're right.

5 You want it put all together? Okay. Do
6 we hear support for that? Any concerns with that?

7 I'll just ask the basis of the \$1500.

8 MS. FRAZIER: The -- the goal is to get
9 that RUC energy floor above the level of any competitive
10 offers in -- in the market because the way that it is
11 now, you have RUC undercutting some competitive offers,
12 especially in tight gas situations or for some quick
13 units. And so when you are now adding another layer of
14 resources in at a flat spot at 500, it's just a lot of
15 flat spots that could undercut competitive offers.

16 MS. STEPHENSON: Bill?

17 MR. SMITH: I think we are -- is everybody
18 on a formal assignment to WMS to take a look at RUC? I
19 mean, I think there's another initiative that's going to
20 address RUC as a whole.

21 MS. STEPHENSON: So ROS is talking about
22 RUC and how it's being deployed and some analysis around
23 that. I don't know what else -- there's this idea of do
24 we need RUC or do we change how we use RUC in the
25 future. We haven't really kicked that off yet, I don't

1 think, in any of the working groups.

2 UNIDENTIFIED MALE SPEAKER: The -- my
3 response to what Amanda's concerns are is that I don't
4 think that issue, you know, is -- there's still going to
5 be work done on that. And I think the assignment
6 that -- that we're charged with is best met through what
7 we see up on the board.

8 MS. FRAZIER: No, I understand that. I
9 understand that, that there are other outstanding issues
10 with RUC; but what we're doing is trying to come up with
11 a compromise that addresses various types of price
12 suppression created by -- and we're doing it in the
13 energy price by -- this compromise is focused on 626,
14 which is an energy price.

15 And I think by voting for this, we're
16 foregoing some of our opportunity to get other fixes
17 that we had, you know, talked about through the ORDC
18 that would address some of those energy -- you know,
19 ORDC price suppression issues.

20 And so while I recognize that RUC -- there
21 are a lot of other issues with RUC and RUC is still on
22 the table in a number of different forums, it would make
23 me more able to vote on a compromise dealing with price
24 suppression if we could address the energy offer floor
25 for RUC as part of this compromise.

1 MR. BRAD JONES: So I think what we're
2 looking for: Is there any opposition to that?

3 MS. STEPHENSON: I'm trying to recall how
4 we set the thousand dollars in the first place, and I
5 believe it was a Dan Jones recommendation. Does -- does
6 anyone else remember more about that? Yeah, less than
7 3,000 and 1,000.

8 MS. FRAZIER: It was also part of a
9 compromise to get the ORDC passed back in November at
10 PRS.

11 MS. STEPHENSON: Yes. Okay.

12 Okay. I'm not hearing any objections.
13 Okay. Put it on there.

14 UNIDENTIFIED MALE SPEAKER: Can you -- is
15 this going to be a sub bullet of this last bullet, or
16 are we starting a new bullet?

17 MS. FRAZIER: A new bullet just like
18 you've got it there and just say, Raise RUC energy offer
19 floor -- it's actually a floor and cap -- to -- to \$1500
20 per megawatt hour.

21 MS. STEPHENSON: Go ahead, Marty.

22 MR. DOWNEY: Simple terms. So any time
23 RUC is dispatched, it's at \$1500 in the price --

24 (Indiscernible discussion)

25 MR. DOWNEY: Say that again, please?

1 UNIDENTIFIED MALE SPEAKER: The energy is
2 in SCED at that price, so dispatched usually means the
3 unit is on and running.

4 MR. DOWNEY: Yeah.

5 UNIDENTIFIED MALE SPEAKER: If it's
6 deployed on its offer curve, it will be at that price.

7 UNIDENTIFIED MALE SPEAKER: At least that
8 price.

9 MS. STEPHENSON: At least that price.

10 UNIDENTIFIED FEMALE SPEAKER: When it is
11 deployed for capacity and when we -- when we dispatch
12 it -- a poor condition --

13 MR. DOWNEY: Yeah, that's a good
14 clarification. So if it's transmission constrained,
15 then it's -- it will still be mitigated.

16 MS. STEPHENSON: So if there's a local
17 reason, it will still have been mitigated.

18 MR. DOWNEY: And most of RUC is local
19 reasons. Right?

20 MS. STEPHENSON: Well --

21 MR. BRAD JONES: Not all.

22 MS. STEPHENSON: Not all. This --

23 MR. DOWNEY: Not all.

24 MS. STEPHENSON: The past winter showed a
25 lot more RUC for capacity shortage.

1 MR. DOWNEY: Yeah, if you ignore January
2 and February of this year, yeah, you're right.

3 MS. STEPHENSON: Exactly. In those
4 extreme weather events, you're going to see more RUC for
5 capacity shortages.

6 MS. FRAZIER: And Marty, the goal here is
7 that you won't be deploying those RUC units, that you'll
8 be deploying competitive units instead that are lower
9 priced.

10 MR. DOWNEY: I'd rather see a market
11 solution than a regulated solution, yes.

12 MS. STEPHENSON: Okay. Eric.

13 MR. GOFF: I just realized that kind of
14 some of the offline conversations I've had about the
15 curve, we haven't totally had online -- online isn't
16 appropriate in this context, I apologize -- on the
17 microphone. And so there's been discussion about using
18 the best available information or publicly available
19 information to update that in maybe two years, so we
20 could see that it's lower, we could see that it's
21 higher; but if we have any actually relevant offer data
22 from similar loads or IMM reports, then it might make
23 sense to take a look at that again in two years, so to
24 look at the best available data in two years.

25 MS. STEPHENSON: We could try, but I don't

1 know how we're going to get public data on that.

2 MR. GOFF: Well, for example, offer curves
3 expire, confidentiality.

4 MS. STEPHENSON: But they don't put
5 anything in.

6 MR. GOFF: At the moment, they don't.

7 MS. STEPHENSON: Okay. When loads in SCED
8 Step 2 --

9 MR. GOFF: Yeah.

10 MS. STEPHENSON: -- Version 2, I should
11 say --

12 MR. GOFF: Yeah.

13 MS. STEPHENSON: -- occurs, there --

14 MR. GOFF: Yeah.

15 MS. STEPHENSON: -- may be some of this.
16 Yeah, I know. Or Version 5.

17 MR. GOFF: And -- and then there's also,
18 you know, the IMM might report -- in the -- state in her
19 report when they typically come offline, like we've --
20 you know, that kind of stuff, so just the best available
21 data.

22 MS. STEPHENSON: Sure. I think that's
23 something that WMS can review and see what's out there.

24 MR. GOFF: But I'd like to have that in
25 the protocol language to have them review it in two

1 years.

2 MS. STEPHENSON: Okay. So could we add
3 under the second-to-last bullet, just you can add it
4 after that 700 megawatts, that a stakeholder review will
5 occur.

6 MR. GOFF: In two years using the best
7 available data.

8 MS. STEPHENSON: Okay.

9 MR. GOFF: And then we've talked a lot
10 about how none of us like the effects of RUC on the
11 market and how to mitigate that. And so it would be
12 great if we also made an assignment to WMS to look at
13 ways to minimize the --

14 MS. STEPHENSON: We already --

15 MR. GOFF: -- of RUC.

16 MS. STEPHENSON: -- we already have that.
17 WMS and ROS have that assignment to look at the way
18 ERCOT's using RUC, and minimizing it is --

19 MR. GOFF: Okay.

20 MS. STEPHENSON: -- definitely the key
21 there, so I think we're good.

22 MR. GOFF: Did that assignment occur --
23 when did that assignment occur?

24 MS. STEPHENSON: Months ago.

25 UNIDENTIFIED MALE SPEAKER: Couple months.

1 MS. STEPHENSON: Yeah, months ago. And
2 that's in process. April is what I've been told. Okay.

3 Okay. So any other discussion? So this
4 is the compromise right now. From a process standpoint,
5 we'll come back at 1:00. This will be one of the early
6 voting items to see if we can get this passed.

7 If this is passed, the way we've kind of
8 talked about it is, I would go to the board, just give
9 them an update what's going on, make sure they're aware
10 of this. They know what's going on through the RATF
11 process for the past few months, so, you know, I
12 don't -- I'm not asking for a vote from them or anything
13 like that but just an update. You know, obviously the
14 Commission will be informed of this.

15 And then unless we hear otherwise, we'll
16 continue with NPRR626, which comments that will need to
17 be filed to make these adjustments, and that will go
18 through the PRS process and hopefully at the June
19 meeting, because I think this is going to become a high
20 priority item for PRS, if this is approved. Okay.

21 Seth?

22 MR. COCHRAN: I don't have a question
23 about the process --

24 MS. STEPHENSON: Okay.

25 MR. COCHRAN: -- or a comment about that,

1 but on the proposal itself, so on that item that says
2 "D, deploy load resources other than controllable --
3 controllable load resources," are we going to add the
4 LaaR deployment back in to generation to be dispatched,
5 and we're going to have the bid to buys?

6 MS. STEPHENSON: Correct.

7 MR. COCHRAN: We're going to do both?

8 MS. STEPHENSON: Yes.

9 MR. COCHRAN: Okay.

10 MS. STEPHENSON: Resmi or Cy can explain
11 how that will work.

12 MR. COCHRAN: Why is that -- why is that
13 necessary? I'm just trying to wrap my head around that.

14 UNIDENTIFIED MALE SPEAKER: It's part of
15 the package. I mean, all that we're saying is, we
16 have -- if you look at the original 626, the GTBD was
17 shifted by adding it back. All we are saying is, we
18 take it and we put a slope to that in a bid to buy. So
19 you have to do that. It's not either/or. You're not
20 double-counting; you're not doing anything. That is how
21 it has to be done in terms of if you want to have demand
22 side elasticity.

23 MR. COCHRAN: Okay.

24 UNIDENTIFIED MALE SPEAKER: So it's --
25 coming back, I can -- I can bring up some slides on the

1 loads and SCED kind of stuff. It's just how you model
2 demand side elasticity is you add the demand that could
3 be curtailed, but you put a slope on it. So the price
4 is right, that thing is going to get curtailed.

5 MR. COCHRAN: Okay. You just made that
6 make sense. Okay. Gotcha. Thank you.

7 MS. STEPHENSON: I will say, one thing
8 Brad just said that ERCOT's going to have to evaluate if
9 they do it on the supply side or the demand side. It'll
10 have the same impact, but it may be easier to do a proxy
11 generation offer curve for that load, but we'll get
12 there when we start fleshing out the details.

13 Okay. Randy?

14 MR. RANDY JONES: So I guess we should
15 anticipate that TAC would be asked to endorse this in
16 concept?

17 MS. STEPHENSON: Correct.

18 MR. RANDY JONES: Only because we've still
19 got to vet the -- all the edits and everything?

20 MS. STEPHENSON: Correct. This would be a
21 policy cut, pretty much.

22 MR. RANDY JONES: Okay.

23 MS. STEPHENSON: But I want to say that,
24 you know, I think all the technical details will
25 continue to be worked out at PRS and the right

1 subcommittees, but I'm hoping we're not renegotiating
2 anything that we've just put down here. We're not
3 adding anything. This is -- this would be the format
4 this NPRR should come up to TAC. Does that make sense?

5 MR. RANDY JONES: I agree with you, but
6 there's no guarantee.

7 MS. STEPHENSON: There's no guaran -- I
8 agree a hundred percent.

9 MR. RANDY JONES: Okay.

10 MS. STEPHENSON: But I'm hoping we don't
11 want to do this again.

12 Okay. Amanda?

13 MS. FRAZIER: I just have a process
14 question. So during the RATF portion of our TAC meeting
15 this afternoon, this is going to be back up on the
16 screen and we're going to take a formal vote?

17 MS. STEPHENSON: If people are ready to do
18 that, I'd like to, yes.

19 MS. FRAZIER: Okay. Thanks.

20 MS. STEPHENSON: Okay. We do have another
21 item that was on the agenda which is about ERS and the
22 OBD change to add it back into the calculation -- well,
23 take it out of the calculation, I should say. I don't
24 know if we need to have that discussion anymore unless
25 anyone has a --

1 UNIDENTIFIED MALE SPEAKER: We're here --
2 MS. STEPHENSON: -- big desire to do that.
3 Bob submitted that OBD. Do you want to talk about it or
4 would you like to?
5 MR. HELTON: I can talk about the ERS
6 portion.
7 MS. STEPHENSON: Yeah. That would be
8 great, yeah.
9 MR. HELTON: Of course, I'm not sure what
10 you want me to add to it. I mean, I could just run
11 through the scenario. We know what happens on the -- on
12 the ORDC side, which is different than the LRS.
13 The LRS, as we know, it's in the equation.
14 And then whenever they're deployed, it transfers that
15 over so it's flat on the ORDC.
16 Now what happened with the ERS is the
17 Commission -- and this is one thing that was in, I
18 think, what Kenan had put out on the compromise that I
19 kind of thought was interesting, that the ERS, the valid
20 reason we had for that not being in the ORDC was because
21 the Commission told us not to put it there. So to me,
22 that's a valid reason.
23 Now, what happens is is, say, you have
24 200 megawatts of reserves on the system and
25 500 megawatts of ERS is deployed. What happens is, the

1 reserves actually go to 2500 then on the system, so you
2 have a reversal in the ORDC.

3 And that's what we're looking at here, is
4 to keep it flat, which is what happens with LRS. You
5 would have to pull the ERS out of the ORDC so that when
6 they were deployed, it would remain -- the reserves
7 would remain 2,000 before deployment, 2,000 after
8 deployment. And which is the same way it's handled
9 through the -- with the LRS, except we don't have to
10 pull it out because it's added into the front end of --
11 of the ORDC. So that's what that other binding document
12 does. It keeps it flat like you do with the OR -- with
13 the LRS.

14 MS. STEPHENSON: Okay. Great.

15 Any questions for Bob?

16 (No response)

17 MS. STEPHENSON: Okay. So we can break
18 now. I don't think lunch is here, for those who ordered
19 sandwiches, but we cannot take up -- can we go into a
20 TAC meeting and not take up voting items, or we can't
21 even do that? Okay. Well, we can't do anything. All
22 right. So you have an hour and a half. What?

23 UNIDENTIFIED MALE SPEAKER: You can't
24 waive notice?

25 MS. STEPHENSON: Can we waive notice to at

1 least -- I -- I still think if -- if we can get through
2 the compromise vote quickly, we'll get through this
3 today. I don't think we'll need to meet tomorrow,
4 unless -- so, I mean, we'll just go until we finish.
5 How about that? All right. And you still get an hour
6 and a half lunch break.

7 All right. Thank you guys for everyone's
8 work and compromise on all of this. I think this is a
9 great result, so appreciate it.

10 (Video recording concluded)

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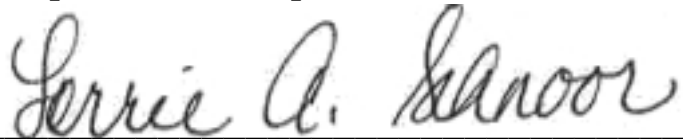
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COUNTY OF WILLIAMSON)

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I FURTHER CERTIFY THAT I am neither counsel for, related to, nor employed by any of the parties to the action in which this proceeding was taken, and further that I am not financially or otherwise interested in the outcome of the action.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 13th day of January, 2022.



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